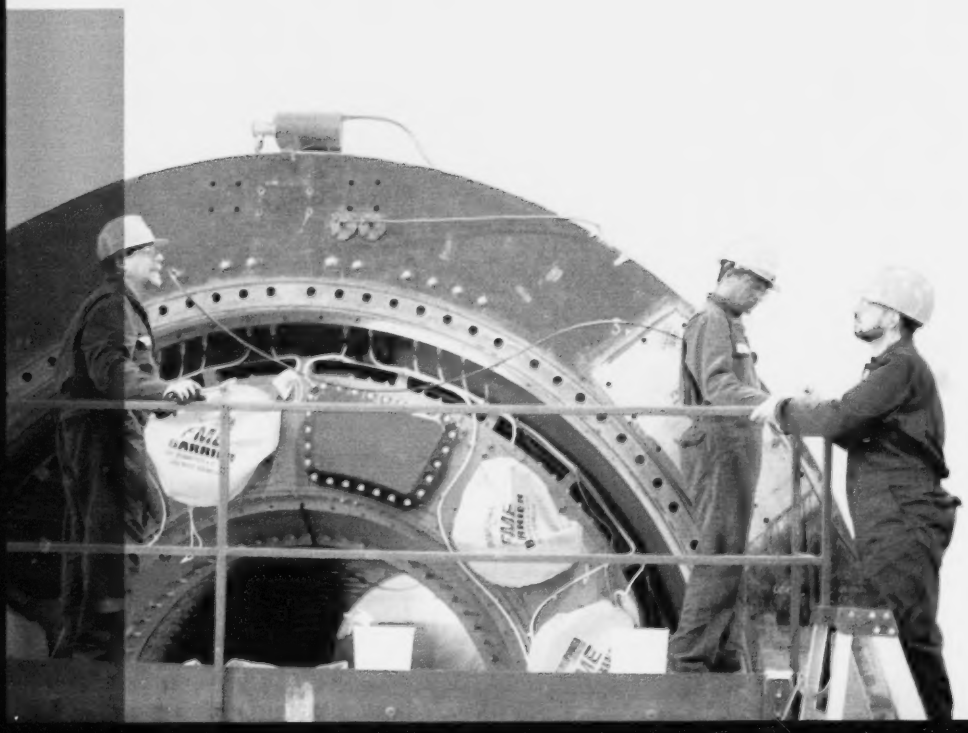
2011 ANNUAL REPORT



ONTARIO POWER GENERATION

2011 OVERVIEW

Financial Highlights

(millions of dollars – except where noted)	2011	2010
REVENUE		
Revenue	**5,061**	5,367
Fuel expense	**754**	900
Gross margin	**4,307**	4,467
EXPENSES		
Operations, maintenance and administration	**2,756**	2,913
Depreciation and amortization	**723**	688
Accretion on fixed asset removal and nuclear waste management liabilities	**702**	660
Earnings on nuclear fixed asset removal and nuclear waste management funds	**(509)**	(668)
Restructuring due to coal unit closures	**21**	27
Property and capital taxes	**51**	77
Other (gains) losses	**(29)**	5
	3,715	3,702
Income before interest and income taxes	**592**	765
Net interest expense	**165**	176
Income tax expense (recovery)	**11**	(60)
Net income	**416**	649
ELECTRICITY PRODUCTION (TWh)	**84.7**	88.6
CASH FLOW		
Cash flow provided by operating activities	**990**	817

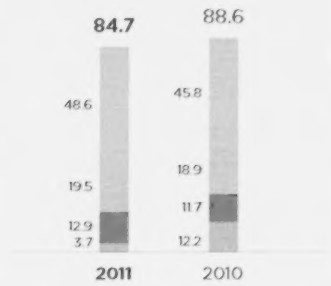
Electricity Terms

- **One megawatt** (MW) is one million watts. Megawatts are a measure of electricity supply capacity at a point in time.
- **One kilowatt** (kW) is 1,000 watts; one gigawatt (GW) is one billion watts; and one terawatt (TW) is one trillion watts.
- **One kilowatt hour** (kWh) is a measure of electricity demand or supply per hour. One kilowatt hour is the energy expended by fifty 20-watt compact fluorescent lights burning for one hour. The typical residential customer uses approximately 800 kWh per month.
- **One megawatt hour** (MWh) is 1,000 kWh; one gigawatt hour (GWh) is one million kWh; and one terawatt hour (TWh) is one billion kWh.

Revenue & Operating Highlights

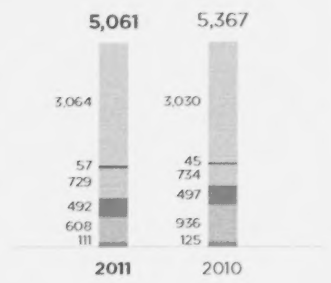
Electricity Generation by Segment

(TWh)



Revenue by Segment

(millions of dollars)



In-Service Generating Capacity (MW) by Segment

December 31, 2011

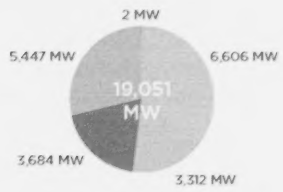


Chart Legend

- Regulated – Nuclear Generation
- Regulated – Nuclear Waste Management
- Regulated – Hydroelectric
- Unregulated – Hydroelectric
- Unregulated – Thermal
- Other

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WE ARE OPG

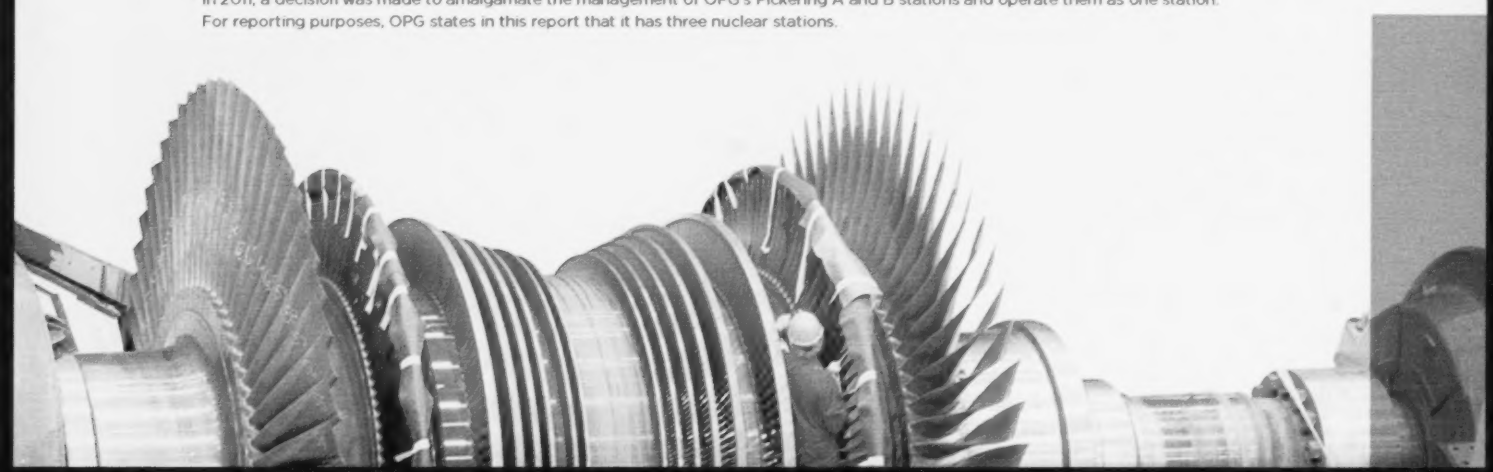
OPG is an Ontario-based electricity generation company whose principal business is the generation and sale of electricity in Ontario. OPG's focus is on the efficient generation and sale of electricity from its generating assets, while operating in a safe, open and environmentally-responsible manner. OPG was established under the *Business Corporations Act* (Ontario) and is wholly owned by the Province of Ontario.

At December 31, 2011, OPG's electricity generating portfolio had an in-service capacity of 19,051 megawatts ("MW"). OPG operates:

3*	5	65	2
Nuclear generating stations	**Thermal** generating stations	**Hydroelectric** generating stations	**Wind Power** turbines

In addition, OPG and TransCanada Energy Ltd. co-own the Portlands Energy Centre gas-fired combined cycle generating station. OPG and ATCO Power Canada Ltd. co-own the Brighton Beach gas-fired combined cycle generating station. OPG also owns two other nuclear generating stations, which are leased on a long-term basis to Bruce Power L.P. These co-owned and leased stations are incorporated into OPG's financial results but are not included in the generation portfolio statistics set out in this report.

* In 2011, a decision was made to amalgamate the management of OPG's Pickering A and B stations and operate them as one station. For reporting purposes, OPG states in this report that it has three nuclear stations.



THE Board was pleased with OPG's performance in 2011. The company delivered sound results in all of its core business segments, as well as in key performance areas such as safety and project development. The Board congratulates OPG employees for this achievement.

As Ontario's largest electricity generator, OPG's goal is to operate as a safe, accountable, reliable and financially-sustainable company. OPG contributes significantly to the Province's economy, while meeting its present and future electricity needs. While OPG management is responsible for the day-to-day operation of the company, the Board provides strategic oversight, stewardship and support to management in this task.

Strategic Investments for Ontario

It is important to the Board that OPG continue its investments in renewing energy infrastructure, as outlined in the government's *Long-Term Energy Plan*. These investments include refurbishing the Darlington nuclear station and preparing for the construction of two proposed new nuclear units at the Darlington site.

In 2011, significant milestones were achieved in these areas as well as in the company's major hydroelectric development projects – the Niagara Tunnel and the Lower Mattagami project. These projects provide clean, low-emission electricity and contribute significantly to Ontario's economy by creating direct and indirect employment and economic spin-offs.

Long-Term Financial Sustainability

Ensuring OPG's financial sustainability is a Board priority. The company's cost-reduction and efficiency initiatives started in 2008 in response to changing economic conditions and decline in electricity demand. Efficiency and savings remain an important focus for the Board.

Despite this challenging environment, OPG continues to provide value. We continue to mitigate electricity prices for Ontarians. The profits we earn remain in Ontario. OPG's net income, gross revenue charges for its hydroelectric stations, interest, taxes, and other payments totalled about $900 million in 2011 – all to the benefit of Ontario.

To continue to benefit Ontario, OPG is also transforming its business operations. The Board believes it is essential to maintain OPG's long-term financial sustainability in order to continue its economic contribution to the people of Ontario and be Ontario's low-cost generator of choice.

Fukushima and OPG's Leadership

The earthquake and tsunamis that precipitated the Fukushima nuclear event were devastating for the people of Japan. While this event was only one aspect of a much larger national disaster, it had a huge impact on the

Chairman Jake Epp congratulates OPG Charity Campaign volunteers for their successful fundraising efforts in 2011.

"The Board believes it is essential to maintain OPG's long-term financial sustainability in order to continue its economic contribution to the people of Ontario and be Ontario's low-cost generator of choice."

• **Jake Epp**, Chairman of the Board

international nuclear industry. It made all nuclear operators and regulators review their operations, planning and preparations to prevent similar "beyond design basis" events from occurring at their facilities.

OPG played an important role in this process, working closely with its nuclear regulator, the Canadian Nuclear Safety Commission, and nuclear operators from around the world.

The Board is particularly proud of the contribution made by President and CEO Tom Mitchell, as chair of the Post-Fukushima Commission established by the World Association of Nuclear Operators. Tom's appointment was recognition of his stature and leadership in the world nuclear-energy community. It was also a reflection of the high regard with which OPG's operations and performance are held internationally. This kind of achievement only comes from safe, strong and sound operations at home.

Expanding Our Outreach

In 2011, the Board approved a revised First Nations and Métis Relations Policy. The Board amended its policy for two reasons: (1) to recognize Ontario's Métis peoples; and (2) to recognize that OPG's operations and projects with First Nations and Métis include all our generation sources, not only hydroelectric.

The Board values strong relationships with First Nations by resolving past grievances. In August, I attended the signing ceremony between OPG, Wabaseemoong Independent Nation (WIN) and the province of Ontario. The agreement was the outcome of much hard work and commitment, from all three parties, to resolve outstanding issues fairly.

The Board also enhanced its participation in OPG's outreach to First Nations. As part of its visits to OPG sites to meet employees, the Board toured OPG's St. Lawrence facilities and held its annual retreat and strategy session on site. While there, Board and Management attended a cultural evening, hosted by the Chief and Council of the Mohawks of Akwesasne. We thank our hosts for their hospitality and friendship.

Recognitions

In March 2012 two directors, Corbin McNeill and David MacMillan, departed from the OPG Board. Both were dedicated, long-time Board members who served OPG for more than seven years. Corbin McNeill provided us with an outstanding level of service and leadership, particularly in governance and nuclear operations. David MacMillan provided us with leadership on major projects and financing, which will help OPG deliver on new projects in *Ontario's Long-Term Energy Plan*. Both men will be missed, and we wish them all the best in their future endeavours.

I would also like to thank Tom Mitchell, his management team, and the employees of OPG for their valued contribution in 2011. Your achievements have significantly advanced OPG in its vision to be the safe, reliable, low-cost generator of choice for Ontarians. We look forward to the company's continued success in 2012.

Top to bottom:

- OPG Board of Directors held its annual retreat at the St. Lawrence Power Development Visitor Centre in October, 2011
- Jake Epp, at OPG Head Office, December, 2011

JAKE EPP
Chairman

IN the face of a challenging environment, OPG produced solid results in 2011. Net income for the year was $416 million compared to net income of $649 million in 2010. Asset reliability continued to be strong. We kept a tight rein on expenditures, and we made important advances in our major generation projects.

Our accomplishments continue to demonstrate OPG's value as Ontario's low-cost electricity producer. But the achievement I'm most proud of is our outstanding workplace safety performance.

Focusing on Safety

In 2011, we achieved the best workplace safety performance in our history. All Injury and Accident Severity rates were the lowest ever recorded at OPG. In addition, many of our plants and business units celebrated significant safety milestones, including our Darlington station, which achieved 12-million person hours without a Lost Time Injury. Although these are significant accomplishments, we are not complacent and will maintain this positive momentum to reach our goal of zero injuries.

OPG's safety commitment was further underscored by our response to the Fukushima nuclear event in Japan. Working with the Canadian Nuclear Safety Commission (CNSC), we reconfirmed that our nuclear plants are safe and have taken a number of actions to further increase safety margins at these facilities.

Enhancing Reliability

While OPG's electricity production was lower over previous years at 84.7 TWh, the reliability and performance of many of our generating assets were strong.

Five of OPG's 10 operating nuclear reactors achieved unit capability factors of over 90 per cent – compared to only two units in 2010. Darlington's Forced Loss Rate was an outstanding 0.59 per cent compared to 3.23 per cent in 2010. The availability of OPG's hydroelectric stations remained high at 91 per cent. Also in January, two of our thermal stations, Lennox and Nanticoke, celebrated milestone anniversaries of 35 and 40 years of service respectively. Together, these stations have contributed close to 600 TWh of reliable electricity to Ontario over the course of their operational lives.

Tom Mitchell addressing the audience in Toronto at the Conference on Waste Management, Decommissioning and Environmental Restoration for Canada's Nuclear Activities

"Our accomplishments continue to demonstrate OPG's value as Ontario's low-cost electricity producer. But the achievement I'm most proud of is our outstanding workplace safety performance."

Tom Mitchell, President and Chief Executive Officer

Committing to Environmentally Responsible Operations

With nuclear and hydroelectric production increasing to 81 TWh, 96 per cent of our total generation came from sources that produce virtually no emissions that contribute to smog or climate change.

OPG's increasingly low-emission generation is in part a result of the company's effective implementation of the Ontario government's policy to phase out coal-fired generation by the end of 2014. As part of this commitment, at year-end, OPG removed from service Units 1 and 2 at the Nanticoke Generating Station. Since 2010, a total of six OPG coal units have been shut down; and since 2005, OPG's coal-fired electricity production has been reduced by almost 90 per cent.

As the end of coal-fired generation in Ontario approaches, we continue to explore the possibility of converting some of our units to cleaner burning biomass and natural gas.

We are also developing relationships with biodiversity groups and organizations in the electric vehicle sector. In addition, OPG has partnered with organizations in the transportation sector and has launched its own electric vehicle program.

Delivering Value

OPG received an average price of 5.3 cents per kilowatt hour in 2011, which had a moderating effect on the price of electricity for Ontarians.

OPG also delivers value through its many generation development initiatives, including the Niagara Tunnel and Lower Mattagami River projects. These initiatives represent hundreds of MWs of additional clean, renewable energy for the province and billions of dollars in investment in Ontario's economy. As a publicly-owned company, OPG's net income remains in Ontario, supporting economic growth and opportunity in the province.

Sustaining Success

To maintain its strong performance while continuing to deliver value to Ontario, OPG is advancing on its core strategy, consisting of four fundamental areas:

Hydro expansion: OPG is engaged in some of the largest hydroelectric development projects ever undertaken in the province. Representing hundreds of construction related jobs for Ontarians, these projects also build strong economic relationships with First Nations – who partner with OPG on many of these initiatives.

Top to bottom:

- Tom Mitchell speaking at the annual meeting of the Canadian Nuclear Association in Ottawa
- Tom Mitchell announcing the completion of the tunnel excavation phase of the Niagara Tunnel Project, near Niagara Falls, Ontario

Top to bottom:

- Tom Mitchell conducting a "Face-to-Face" session with employees at OPG's Saunders generating station in October, 2011
- Tom Mitchell honouring OPG's Empowered Women graduates

In 2011, OPG made significant progress on two of its most important hydroelectric projects. Tunnel excavation was completed on the $1.6 billion Niagara Tunnel, which we expect to be completed in 2013. Construction also progressed on the $2.6 billion Lower Mattagami hydro project – including cofferdam work and concrete pouring. This is the largest hydro development project in northern Ontario in 40 years, employing approximately 1,000 people – including 250 First Nations and Métis persons. The project is scheduled to be in service by 2015.

Nuclear revitalization: OPG is significantly involved in the renewal of Ontario's nuclear energy infrastructure. This includes moving forward with our plans to refurbish our four-unit Darlington plant. To date, the project's technical scope has been finalized, and the Environmental Assessment and final Integrated Safety Review have been submitted to the nuclear regulator. Construction began on the Darlington Energy Complex, which will provide training to employees working on refurbishment. Simultaneous with our refurbishment activities, OPG also continued with the federal approvals process for the construction of two new nuclear units at its Darlington site. Both these undertakings are multimillion-dollar projects with the potential to create thousands of jobs for Ontarians.

Thermal conversion: OPG also continued to proceed with engineering work and business case preparations for the possible conversion of its coal units to biomass or natural gas. The strength of these units lies in their ability to quickly provide dispatchable power – especially during periods of high demand. Conversion presents a potential option for preserving the flexibility and value these units provide, while at the same time reducing their environmental impact.

Business transformation: In 2011, OPG introduced a major business initiative to transform itself into a more streamlined, agile and efficient organization. This involves an intense focus on cost control and efficiency – and included the merger of our hydroelectric and thermal businesses. We will continue to refine and implement this initiative in 2012 and beyond.

A transformed OPG, with a sustainable cost structure, will help us: attract more investment for generation and conversion projects; continue to moderate electricity prices; secure our position as a low-cost generator; and ultimately, deliver more value to Ontarians.

Acknowledging Our Employees

The progress we've made in 2011 and the milestones we have reached are a direct result of the contributions from our staff. I am especially proud of their safety performance and their drive to give back to OPG's host communities. In 2011, OPG employees and pensioners contributed over $2 million to OPG's Charity Campaign, and devoted thousands of hours of volunteer work in their communities.

Since becoming CEO, I have travelled extensively across Ontario visiting our worksites from Kenora to Kapuskasing, to Cornwall to Sarnia, and many places in between. I have met with nuclear operators in their control rooms, conversed with our thermal employees on the shop floors at Nanticoke and Lambton, stood with hydro employees at our Saunders station overlooking the historic St. Lawrence waterway, and toured the massive hydro development projects on the Niagara and Mattagami Rivers.

I can say with confidence, that OPG employees are second to none. It's an honour for me to be associated with such talented individuals whose ingenuity and dedication will help ensure we continue to provide the province with safe, clean, reliable, and low-cost electricity for many years to come.

TOM MITCHELL
President and CEO

2011

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MANAGEMENT'S DISCUSSION & ANALYSIS

This Management's Discussion and Analysis ("MD&A") should be read in conjunction with the audited consolidated financial statements and accompanying notes of Ontario Power Generation Inc. ("OPG" or the "Company") as at and for the year ended December 31, 2011. OPG's consolidated financial statements are prepared in accordance with Canadian generally accepted accounting principles ("Canadian GAAP") as determined in Part V of the Canadian Institute of Chartered Accountants Handbook – Accounting ("CICA Handbook") and are presented in Canadian dollars. Certain of the 2010 comparative amounts have been reclassified to conform to the 2011 presentation. This MD&A is dated March 2, 2012.

FORWARD-LOOKING STATEMENTS

The MD&A contains forward-looking statements that reflect OPG's current views regarding certain future events and circumstances. Any statement contained in this document that is not current or historical is a forward-looking statement. OPG generally uses words such as "anticipate", "believe", "foresee", "forecast", "estimate", "expect", "schedule", "intend", "plan", "project", "seek", "target", "goal", "strategy", "may", "will", "should", "could" and other similar words and expressions to indicate forward-looking statements. The absence of any such word or expression does not indicate that a statement is not forward-looking.

All forward-looking statements involve inherent assumptions, risks and uncertainties, including those set out under the heading *Risk Management*, and therefore, could be inaccurate to a material degree. In particular, forward-looking statements may contain assumptions such as those relating to OPG's fuel costs and availability, asset performance, fixed asset removal and nuclear waste management, closure or conversion of coal-fired generating stations, refurbishment of existing facilities, development and construction of new facilities, pension and other post employment benefit ("OPEB") obligations, income taxes, spot electricity market prices, proposed new legislation, the ongoing evolution of the Ontario electricity industry, proposed new legislation, conversion to United States generally accepted accounting principles ("US GAAP"), environmental and other regulatory requirements, health, safety and environmental developments, business continuity events, the weather, and the impact of regulatory decisions by the Ontario Energy Board ("OEB"). Accordingly, undue reliance should not be placed on any forward-looking statement. The forward-looking statements included in this MD&A are made only as of the date of this MD&A. Except as required by applicable securities laws, OPG does not undertake to publicly update these forward-looking statements to reflect new information, future events or otherwise.

THE COMPANY

OPG is an Ontario-based electricity generation company whose principal business is the generation and sale of electricity in Ontario. OPG's focus is on the efficient generation and sale of electricity from its generating assets, while operating in a safe, open and environmentally responsible manner. OPG was established under the *Business Corporations Act* (Ontario) and is wholly owned by the Province of Ontario (the "Province").

As of December 31, 2011, OPG's electricity generating portfolio had an in-service capacity of 19,051 megawatts ("MW"). OPG operates three nuclear generating stations, five thermal generating stations, 65 hydroelectric generating stations, and two wind power turbines. In addition, OPG and TransCanada Energy Ltd. co-own the Portlands Energy Centre ("PEC") gas-fired combined cycle generating station. OPG and ATCO Power Canada Ltd. co-own the Brighton Beach gas-fired combined cycle generating station. OPG also owns two other nuclear generating stations, which are leased on a long-term basis to Bruce Power L.P. ("Bruce Power"). These co-owned facilities and leased stations are incorporated into OPG's financial results, but are not included in the generation portfolio statistics set out in this report.

The in-service generating capacity by business segment as of December 31 is as follows:

(MW)	**2011**	2010
Regulated – Nuclear Generation	**6,606**	6,606
Regulated – Hydroelectric	**3,312**	3,312
Unregulated – Hydroelectric	**3,684**	3,684
Unregulated – Thermal	**5,447**	6,327
Other	**2**	2
Total	**19,051**	19,931

On December 31, 2011, Units 1 and 2 at the Nanticoke generating station were removed from service, which reduced the Unregulated – Thermal capacity by 880 MW. Details on the units and the associated restructuring costs are discussed under the heading, *Vision, Core Business and Strategy*.

OPG's Reporting Structure

OPG receives a regulated price for electricity generated from most of its baseload hydroelectric facilities and all of the nuclear facilities that it operates. This comprises electricity generated from the Sir Adam Beck 1, 2 and Pump generating station, DeCew Falls 1 and 2, and R.H. Saunders hydroelectric facilities, and the Pickering A and B, and Darlington nuclear facilities (collectively the "Prescribed Facilities"). The operating results related to these regulated facilities are described under the Regulated – Nuclear Generation, Regulated – Nuclear Waste Management, and Regulated – Hydroelectric segments. For the remainder of OPG's hydroelectric facilities, the operating results are described under the Unregulated – Hydroelectric segment. The operating results from the thermal facilities are discussed in the Unregulated – Thermal segment.

A description of all OPG's segments is provided under the heading, *Business Segments*.

REVENUE MECHANISMS FOR REGULATED AND UNREGULATED GENERATION

Regulated Generation

OPG's regulated prices for electricity generated from the Prescribed Facilities are determined by the OEB. In March 2011, the OEB issued its decision on OPG's application for new regulated prices. Following its decision, in its April 2011 order, the OEB established a new regulated price for production from OPG's regulated hydroelectric facilities at $34.13/MWh and a new regulated price for production from OPG's nuclear facilities at $55.85/MWh, effective March 1, 2011. In its decision, the OEB also approved the continuation of the existing hydroelectric incentive mechanism ("HIM"), but determined that a portion of the resulting net revenues should be shared with ratepayers.

Further information regarding the OEB's March 2011 decision and April 2011 order on OPG's application and regulated prices in effect prior to March 1, 2011 is included under the heading, *Recent Developments*.

Unregulated Generation

The electricity generation from OPG's other generating assets that are unregulated receives the Ontario electricity spot market price, except where a cost recovery or an energy supply agreement is in place.

The Lambton and Nanticoke generating stations are subject to a contingency support agreement with the Ontario Electricity Financial Corporation ("OEFC"). The agreement was put in place to enable OPG to recover the costs of these coal-fired generating stations following implementation of OPG's Carbon Dioxide ("CO_2") emissions reduction strategy. Production from the Lennox generating station was subject to a Lennox Generating Station Agreement ("LGSA") with the Ontario Power Authority ("OPA") for the period from January 1, 2011 to December 31, 2011. The LGSA has been extended to June 30, 2012.

Generation from the Lac Seul and Ear Falls generating stations, Healey Falls generating station, and the Sandy Falls, Wawaitin, Lower Sturgeon, and Hound Chute generating stations is subject to a Hydroelectric Energy Supply Agreement ("HESA") with the OPA.

HIGHLIGHTS

Overview of Results

This section provides an overview of OPG's audited consolidated operating results. A detailed discussion of OPG's performance by reportable segment is included under the heading, *Discussion of Operating Results by Business Segment*.

(millions of dollars – except where noted)	2011	2010
Revenue	5,061	5,367
Fuel expense	754	900
Gross margin	4,307	4,467
Expenses		
Operations, maintenance and administration	2,756	2,913
Depreciation and amortization	723	688
Accretion on fixed asset removal and nuclear waste management liabilities	702	660
Earnings on nuclear fixed asset removal and nuclear waste management funds	(509)	(668)
Restructuring due to coal unit closures	21	27
Property and capital taxes	51	77
Other (gains) losses	(29)	5
	3,715	3,702
Income before interest and income taxes	592	765
Net interest expense	165	176
Income tax expense (recovery)	11	(60)
Net income	416	649
Electricity production (TWh)	84.7	88.6
Cash flow		
Cash flow provided by operating activities	990	817

Net income for 2011 was $416 million compared to $649 million for 2010, a decrease of $233 million. Income before income taxes for 2011 was $427 million compared to $589 million for 2010, a decrease of $162 million.

OPG's income before income taxes from the electricity generation business segments was $680 million for 2011 compared to $679 million in 2010. This slight increase in income from the electricity generation business segments was primarily due to higher nuclear and hydroelectric generation and lower operations maintenance and administration ("OM&A") costs, largely offset by a reduction of revenue related to the regulatory variance account associated with tax losses and the impact of lower Ontario electricity prices. OM&A costs decreased by approximately $160 million compared to 2010. The Regulated – Nuclear Waste Management business segment recorded a loss before income taxes of $194 million for 2011 compared to income before income taxes of $8 million in 2010. This decrease was primarily due to lower earnings from the Used Fuel Segregated Fund and the Decommissioning Segregated Fund (together "Nuclear Funds") as a result of a decline in the valuation levels of global financial markets in 2011.

The following is a summary of the factors impacting OPG's results for 2011 compared to results for 2010, on a before-tax basis:

(millions of dollars)	Electricity Generation Segments[1]	Regulated Nuclear Waste Management Segment	Other[2]	Total
Income (loss) before income taxes for the year ended December 31, 2010	**679**	**8**	**(98)**	**589**
Changes in gross margin:				
Change in electricity sales price:				
Regulated generation segments	3	–	–	3
Unregulated – Hydroelectric	(90)	–	–	(90)
Change in electricity generation by segment:				
Regulated – Nuclear Generation	143	–	–	143
Regulated – Hydroelectric	13	–	–	13
Unregulated – Hydroelectric	47	–	–	47
Decrease in thermal gross margin due to lower generation, favourable adjustments in thermal inventory in 2010, and expenditures related to adjustments to coal supply contracts in 2011, partially offset by higher revenue related to the contingency support agreement for the Nanticoke and Lambton generating stations	(76)	–	–	(76)
Increase in nuclear fuel expense primarily due to the impact of the regulatory variance account related to nuclear fuel costs and higher nuclear fuel prices	(47)	–	–	(47)
Higher revenue recognized in 2010 related to an energy supply contract for the Lennox generating station	(21)	–	–	(21)
Higher revenue recognized related to energy supply contracts for the Unregulated – Hydroelectric segment, primarily due to Upper Mattagami generating stations placed in service during the fourth quarter of 2010	31	–	–	31
Decrease in gross margin due to the cessation of additions to the Tax Loss Variance Account based on the OEB's March 2011 decision on new regulated prices	(161)	–	–	(161)
Other changes in gross margin	–	12	(14)	(2)
	(158)	12	(14)	(160)
Changes in OM&A expenses:				
Lower expenditures at OPG's nuclear generating stations related to outage and project costs, partially offset by an increase in maintenance activities	127	–	–	127
Lower expenditures due to the continuation of vacancy and overtime management programs and reduced scope of work associated with changing operating profiles at OPG's thermal generating stations	48	–	–	48
Reduction in expenditures related to new nuclear generation development and capacity refurbishment, net of the impact of related regulatory variance accounts	39	–	–	39
Increase in pension and OPEB costs largely as a result of lower discount rates in 2011, net of the impact of the regulatory variance account	(118)	–	–	(118)
Other changes in OM&A expenses	68	(13)	6	61
	164	(13)	6	157
Decrease in earnings from the Nuclear Funds	–	(375)	–	(375)
Impact of the regulatory variance account associated with stations on lease to Bruce Power on earnings from the Nuclear Funds	–	216	–	216
(Increase) decrease in depreciation and amortization expense, primarily due to the amortization of regulatory balances as a result of the OEB's decision effective March 1, 2011, partially offset by lower depreciation expense for OPG's thermal generating stations	(45)	–	10	(35)
Increase in accretion expense primarily due to an increase in the present value of the liabilities for nuclear fixed asset removal and nuclear waste management due to the passage of time	–	(42)	–	(42)
Decrease in capital taxes primarily due to reduction in capital tax related to prior years and the elimination of capital tax as of July 2010	32	–	–	32
Other changes	8	–	37	45
Income (loss) before income taxes for the year ended December 31, 2011	**680**	**(194)**	**(59)**	**427**

1 Electricity generation segments include results of the Regulated – Nuclear Generation, Regulated – Hydroelectric, Unregulated – Hydroelectric, and Unregulated – Thermal segments.

2 Other includes results of the Other category in OPG's segmented statements of income, inter-segment eliminations, and net interest expense.

Electricity Generation

OPG's electricity generation for 2011 and 2010 was as follows:

(TWh)	2011	2010
Regulated – Nuclear Generation	**48.6**	45.8
Regulated – Hydroelectric	**19.5**	18.9
Unregulated – Hydroelectric	**12.9**	11.7
Unregulated – Thermal	**3.7**	12.2
Total electricity generation	**84.7**	88.6

Total electricity generated during 2011 from OPG's generating stations was 84.7 terawatt hours ("TWh") compared to 88.6 TWh during 2010. The decrease in electricity generation was primarily due to a decrease in thermal generation, partially offset by higher nuclear and hydroelectric generation.

Electricity generation from the Unregulated – Thermal segment decreased by 8.5 TWh during 2011 compared to 2010. The decrease was primarily due to higher electricity generation from other generators in Ontario, and increased generation from OPG's nuclear and hydroelectric generating stations. The increase in electricity generation from other generators in Ontario was primarily due to lower natural gas prices relative to coal prices.

Electricity generation from the Regulated – Nuclear Generation segment increased by 2.8 TWh during 2011 compared to 2010. The higher nuclear generation was primarily due to excellent performance at the Darlington generating station with a decrease in the number of planned and unplanned outage days in 2011 compared to 2010. Electricity generation from the Unregulated – Hydroelectric segment increased by 1.2 TWh during 2011 compared to 2010 primarily due to higher water flows.

OPG's operating results are impacted by changes in demand resulting from variations in seasonal weather conditions. The following table provides a comparison of Heating and Cooling Degree Days for 2011 and 2010:

	2011	2010
Heating Degree Days[1]		
Total for year	**3,617**	3,469
Ten-year average	**3,682**	3,660
Cooling Degree Days[2]		
Total for year	**435**	445
Ten-year average	**382**	378

1 Heating Degree Days are recorded on days with an average temperature below 18°C, and represent the aggregate of the differences between the average temperature and 18°C for each day during the period, as measured at Pearson International Airport in Toronto, Ontario.

2 Cooling Degree Days are recorded on days with an average temperature above 18°C, and represent the aggregate of the differences between the average temperature and 18°C for each day during the period, as measured at Pearson International Airport in Toronto, Ontario.

Colder temperatures during the winter of 2011 resulted in higher Heating Degree Days compared to 2010. Cooler temperatures in the summer of 2011 resulted in slightly lower Cooling Degree Days in 2011 compared to 2010.

Ontario primary electricity demand was 141.5 TWh and 142.2 TWh for 2011 and 2010, respectively. The decrease in demand for 2011 compared to 2010 was primarily due to a weaker economy and continuous energy efficiency and conservation improvements.

Average Revenue

The weighted average Ontario spot electricity market price, average revenue per kWh for all electricity generators in Ontario, and OPG's average revenue per kWh from generation paid through the regulated prices, cost recovery or energy supply agreements and the Ontario electricity market, by reportable electricity generation segment, for 2011 and 2010, were as follows:

(¢/kWh)	2011	2010
Weighted average HOEP	**3.1**	3.8
Average revenue for all electricity generators in Ontario[1]	**7.2**	6.5
Regulated – Nuclear Generation	**5.5**	5.5
Regulated – Hydroelectric	**3.5**	3.7
Unregulated – Hydroelectric	**3.2**	3.7
Unregulated – Thermal	**3.3**	4.3
Average revenue for OPG[2]	**5.3**	5.2

1 Computed as the total of average HOEP and average global adjustment payments.

2 Includes other energy revenues primarily from cost recovery agreements for the Nanticoke, Lambton and Lennox generating stations, and revenue from HESA agreements for the hydroelectric generating stations. Had these other energy revenues been excluded, OPG's average revenue would have been 4.6¢/kWh and 4.7¢/kWh in 2011 and 2010, respectively.

The change in average revenue for the Regulated – Hydroelectric segment for 2011 reflects the OEB's March 2011 decision establishing new regulated prices effective March 1, 2011, as discussed under the heading, *Recent Developments*.

The weighted average hourly Ontario spot electricity market price ("HOEP") was 3.1¢/kWh for 2011 compared to 3.8¢/kWh for 2010. The decrease in the average Ontario spot market price for 2011 compared to 2010 was primarily due to higher nuclear and hydroelectric baseload generation in Ontario, and lower natural gas prices in Ontario.

The decrease in average revenue for OPG's unregulated segments for 2011 compared to 2010 was primarily due to the impact of lower Ontario spot electricity market prices.

Cash Flow from Operations

Cash flow provided by operating activities for 2011 was $990 million compared to $817 million for 2010. The increase in cash flow was primarily due to lower OM&A expenditures, lower fuel purchases, and lower tax instalments. This increase was partially offset by lower cash receipts as a result of lower generation revenue in 2011 compared to 2010.

Recent Developments

OPG's New Regulated Prices

In May 2010, OPG filed an application with the OEB for new regulated prices effective March 1, 2011. The regulated prices are applicable to production from OPG's regulated hydroelectric and nuclear facilities. As part of the application, OPG requested approval to recover or repay the balances in the variance and deferral accounts as at December 31, 2010. The OEB issued its decision on OPG's application on March 10, 2011. This was followed by the OEB's order on April 11, 2011, which established a new regulated price for production from OPG's regulated hydroelectric facilities at $34.13/MWh, and a new regulated price for production from OPG's nuclear facilities at $55.85/MWh, effective March 1, 2011. The new regulated prices include rate riders reflecting the OEB's approval for recovery or repayment of variance and deferral account balances as at December 31, 2010. The regulated hydroelectric price of $34.13/MWh is net of a negative rate rider of -$1.65/MWh. The nuclear regulated price of $55.85/MWh includes a rate rider of $4.33/MWh. These rate riders will remain in effect until December 31, 2012.

The following reflects the new regulated prices effective March 1, 2011 compared to those in effect prior to March 1, 2011:

($/MWh)	Effective March 1, 2011	Prior to March 1, 2011[1]
Regulated – Nuclear Generation without rate rider	51.52	52.98
Regulated – Nuclear Generation rate rider	4.33	2.00
Regulated – Nuclear Generation	55.85	54.98
Regulated – Hydroelectric without rate rider	35.78	36.66
Regulated – Hydroelectric rate rider	(1.65)	–
Regulated – Hydroelectric	34.13	36.66

1 Regulated prices were effective for the period from April 1, 2008 to February 28, 2011.

The OEB determined the new regulated prices using a forecast cost of service methodology based on an approved 24-month revenue requirement of $6.7 billion. The forecast cost of service methodology establishes regulated prices based on a revenue requirement taking into account a forecast of production and operating costs for the regulated operations, and a return on rate base. Rate base is a regulatory construct that represents the average net level of investment in regulated fixed and intangible assets and an allowance for working capital.

In its decision, the OEB did not accept OPG's proposal for a variance account related to differences between actual and forecast pension and OPEB costs, and did not incorporate an updated forecast reflecting an increase in these costs submitted by OPG in September 2010. At the end of March 2011, OPG filed a motion asking the OEB to review and vary the part of its decision related to the updated pension and OPEB costs and the proposed variance account. In June 2011, the OEB issued a decision and order that varied the March 2011 decision in the manner requested by OPG. The OEB accepted OPG's updated forecast of September 2010 and established the Pension and OPEB Cost Variance Account effective March 1, 2011. The variance account records the difference between actual pension and OPEB costs for the regulated business and related tax impacts, and the corresponding amounts reflected in the current regulated prices. The account is effective until December 31, 2012, and its balance will be reviewed by the OEB as part of OPG's next application for regulated prices. During 2011, OPG recorded a regulatory asset of $96 million, including $1 million of interest, related to this variance account, which resulted in reductions to OM&A expenses and income tax expense of $74 million and $21 million, respectively.

In April 2011, OPG also filed a notice of appeal with the Divisional Court of Ontario (the "Court") related to the part of the OEB's March 2011 decision disallowing recovery in regulated prices of a portion of OPG's nuclear compensation costs. This matter was heard in October 2011 with supplemental submissions in January 2012. In its decision released February 14, 2012, the Court dismissed the appeal by a 2 to 1 majority. OPG is reviewing the implications of this decision and the dissenting opinion.

In its March 2011 decision, the OEB approved OPG's forecast of non-capital costs related to the Darlington Refurbishment project and to the Pickering B Continued Operations initiative. The OEB did not accept OPG's proposal for advanced recovery of the cost of capital related to capital expenditures on the Darlington Refurbishment project, but indicated that it is prepared to consider this proposal again in the future.

The OEB also approved the disposition of OPG's variance and deferral account balances as at December 31, 2010 without adjustments. These amounts are recovered or repaid through rate riders. The amortization of variance and deferral accounts is discussed in Note 7 of OPG's 2011 audited annual consolidated financial statements. Any shortfall or over-recovery of the approved variance and deferral account balances due to differences between actual and forecast production will be collected from, or refunded to, ratepayers following OPG's next application to the OEB.

As part of its March 2011 decision, the OEB authorized the continuation of the account, which captures the differences between actual and forecast revenues and costs related to the nuclear generating stations under the Bruce Power lease agreement ("Bruce Lease Net Revenues Variance Account"), as well as variance and deferral accounts related to the impact of water conditions on hydroelectric electricity production, changes in liabilities for nuclear used fuel management and nuclear decommissioning and low and intermediate level waste ("L&ILW") management, nuclear development and capacity refurbishment costs, revenues from ancillary services, and income and other taxes. The OEB discontinued the variance account related to nuclear fuel costs, effective March 1, 2011. Only interest and amortization are recorded in this account effective March 1, 2011.

In its decision, the OEB also approved the continuation of the existing HIM but determined that a portion of the resulting net revenues should be shared with ratepayers. As a result, the OEB established the HIM Variance Account. Under the HIM, OPG receives the approved regulated price for the actual monthly average net energy production per hour from the regulated hydroelectric facilities, and, in the hours where OPG's actual net energy production in Ontario is greater or less than the average net volume in the month, OPG's hydroelectric revenues are adjusted by the difference between the average hourly net volume and OPG's actual net energy production from the regulated hydroelectric facilities multiplied by the spot market price. The HIM Variance Account captures the net revenues from the HIM that are required to be returned to ratepayers. Effective March 1, 2011, the OEB also established a variance account to record the financial impact of foregone production at OPG's regulated hydroelectric facilities due to surplus baseload generation ("SBG"). The OEB approved all forecast hydroelectric OM&A costs and capital expenditures as submitted by OPG.

OPG plans to file its next application in the second quarter of 2012 for new regulated prices, including rate riders.

Changes to Nuclear Liabilities Estimate

The most recent update of the estimate for the liabilities for nuclear fixed asset removal and nuclear waste management ("Nuclear Liabilities") was performed as at December 31, 2011 and resulted in a $934 million increase in the liabilities, and a corresponding increase in the carrying value of the nuclear generating stations to which the liabilities relate. The increase in the liabilities is primarily due to higher fixed costs associated with the Used Fuel Storage, L&ILW Disposal and L&ILW Storage programs, discounted using the current credit-adjusted risk-free rate. This increase in the liabilities reflects the results of a comprehensive process undertaken to update the baseline cost estimates for each of OPG's nuclear waste management and decommissioning programs. OPG follows a standard process that requires such an update on a five year cyclical basis unless business circumstances and assumptions dictate an earlier update process. This update to the Nuclear Liabilities results from the Ontario Nuclear Funds Agreement ("ONFA") Reference Plan update process. During the fourth quarter of 2011, OPG submitted the final 2012 – 2016 ONFA Reference Plan to the Province for approval.

Thermal Generating Unit Closures

In October 2010, OPG closed two coal-fired generating units at each of the Lambton and Nanticoke coal-fired generating stations. In response to Ontario's Long-Term Energy Plan ("Energy Plan") and Supply Mix Directive, OPG removed from service two coal-fired units at the Nanticoke generating station on December 31, 2011. OPG is currently in the process of placing the units into a safe shutdown state. The early closure of these coal-fired units, in advance of the December 31, 2014 target deadline, is expected to result in staff reductions of 290 at the Nanticoke generating station and is expected to result in reduced payments to OPG from the OEFC under the contingency support agreement. OPG continues to evaluate the schedule for the remaining coal units while assessing the impact on staff and fuel inventories.

Lennox Generating Station

During the first quarter of 2012, the OPA and OPG executed an extension to the LGSA for the period from January 1, 2012 to June 30, 2012, with an option for an additional six-month extension at OPG's discretion. This agreement allows the station to recover its actual costs in order to provide sufficient generating capacity in the Ontario electricity system to meet electricity demand. The LGSA is expected to be terminated when a longer term contract, which is currently under negotiation, has been executed.

VISION, CORE BUSINESS AND STRATEGY

OPG's mandate is to reliably and cost-effectively produce electricity from its diversified portfolio of generating assets, while operating in a safe, open, and environmentally responsible manner. OPG's vision is to be a leader in Ontario's transition to a more sustainable energy future. OPG is focused on three corporate strategies – performance excellence, project excellence, and financial sustainability.

Performance Excellence

OPG's business segments and corporate groups are guided by the Company's commitment to performance excellence in the areas of generation, the environment, and safety.

Nuclear Generating Assets

Performance excellence at OPG's nuclear generating facilities is defined as generating safe, reliable and cost-effective electricity. This is achieved through the effective execution of work programs and initiatives in the four cornerstones of safety, reliability, human performance and value for money.

OPG continually benchmarks the practices, processes and performance of its nuclear generating facilities against other top performing nuclear facilities around the world. This benchmarking has resulted in the implementation of initiatives to further improve the performance of OPG's nuclear generating facilities.

Nuclear employee and environmental safety are overriding priorities in the operation of OPG's nuclear stations. Overall safety performance is strong at OPG's nuclear sites where most of the safety metrics are considered industry top quartile, including the All Injury Rate ("AIR") and the Accident Severity Rate ("ASR"). Nuclear inspection and testing programs are largely driven by maintenance governance requirements designed to ensure that equipment is fit for service and performs as expected. This enables OPG to satisfy regulatory requirements that the stations are safe to operate, and that nuclear safety is not compromised.

Reliability involves operating and maintaining OPG's nuclear facilities such that equipment, performance, availability, and output are optimized. Improved equipment reliability reduces generation interruptions, and facilitates efficient planning and execution of outages. Programs and initiatives such as Work Order Readiness and the Standard Equipment Reliability Program are implemented to support these objectives. Reducing unplanned outages is another major strategy in achieving performance excellence. Over the past few years, unplanned outage performance has consistently improved. In 2011, Darlington achieved the lowest level of unplanned outages in its history. OPG's maintenance strategy has evolved from programs designed to improve equipment condition to initiatives that increase the reliability and predictability of performance through comprehensive life cycle maintenance of systems.

Emphasis and focus on the successful execution of outages continues to be a high priority. Initiatives aimed at improving the planning, execution, monitoring and reporting of outage work, as well as reducing outage costs and increasing generation are ongoing. The planned outage programs at the Pickering B generating station over the next five years reflect OPG's objective of achieving extended lives for these units to allow them to operate safely until the end of this decade. OPG is undertaking a coordinated set of initiatives to evaluate the opportunity to continue safe and reliable operations of Pickering B generating station for approximately an additional four to six years beyond its nominal end of life. Details regarding OPG's plans are discussed under the *Project Excellence* section of this MD&A. For Pickering A Units 1 and 4, 20-day mid-cycle outages are planned to allow for corrective and preventive maintenance, and to minimize future unplanned outages. Darlington units continued to demonstrate excellent reliability in 2011, and efforts continue to ensure reliability of the units prior to refurbishment.

Human performance involves measuring the ability of employees to follow processes and procedures, and to operate in a nuclear environment with a strong safety and performance culture. OPG's nuclear generating stations performed well in the area of managing human performance in 2011, as indicated by a low number of human performance events – a common industry defined measure reported by all nuclear facilities. OPG's nuclear business segment continues to implement training programs to improve employee performance and promote leadership development.

The value for money cornerstone encompasses delivering solutions that represent the best combination of cost, quality, and human performance. In 2011, OPG continued its comprehensive benchmarking in order to identify initiatives to improve performance and establish challenging financial targets. Staffing targets have been reviewed and adjusted where necessary to manage and improve operating costs. Commencing in 2012, the Pickering stations will be managed as an integrated six unit site through the operational amalgamation of the Pickering A and B generating stations. A Sustainable Operations Plan was submitted to the Canadian Nuclear Safety Commission ("CNSC") in 2011 that describes the strategy for safe operation of the site in an integrated fashion for the balance of this decade.

Following the events at the Fukushima Daiichi nuclear facilities in Japan in March 2011, OPG has been engaged in a significant effort to validate its design and operational defences against events which the stations are designed to withstand ("design-basis"), and against events which are beyond the design-basis of the stations. This effort also supports the World Association of Nuclear Operators ("WANO") Significant Operating Experience Report 2011-2 and CNSC directives.

OPG's response to these events has been to ensure that the initial facility assessments were comprehensive and that all lessons learned are implemented using a phased approach. The assessment results confirmed that the risk related to both station and waste management facility operations continues to be acceptably low. In addition, OPG identified a number of areas to increase safety margins for further review and consideration.

OPG has prepared implementation plans and provided an update on work-in-progress to both the CNSC and WANO. As part of OPG's continuous improvement efforts to increase safety margins for its nuclear stations, OPG began a process of implementing actions, acquiring items such as portable standby electrical supplies, and improving emergency response procedures.

Hydroelectric Generating Assets

The hydroelectric business segments are focused on producing electricity in a safe, reliable, cost-effective, and environmentally responsible manner. OPG plans to continue to increase the capacity of the existing stations by replacing aging equipment such as turbines, generators, transformers, and other control components with more efficient equipment.

The hydroelectric business segments have the following objectives:

- Sustain and improve the existing hydroelectric assets for long-term operations;
- Operate and maintain hydroelectric facilities in an efficient and cost-effective manner;
- Seek to expand existing and develop greenfield hydroelectric stations where feasible;
- Maintain and improve reliability performance where practical and economical;
- Maintain an excellent employee safety record and ensure all worker safety laws are met;
- Strive for continuous improvement in the areas of dam and waterways public safety and environmental performance; and
- Build and improve relationships with First Nations and Métis.

OPG plans to increase the capacity of existing stations by 34 MW over the next five years through the replacement of existing turbine runners and installation of more efficient equipment. The replacement of control equipment will also improve efficiency and accommodate market dispatch requirements. OPG is also planning to repair, rehabilitate, or replace aging civil structures. OPG is assessing the development of additional pumped storage facilities to offset operating challenges related to low demand and increasing wind generation in Ontario.

OPG completed major equipment overhauls and rehabilitation work at several stations during 2011, including a runner upgrade at Unit 8 of the Des Joachims generating station, and transformer replacements at Units 7 and 8 of Des Joachims and at Units 1 to 6 of the Sir Adam Beck Pump generating stations. Protection and control upgrades were completed at the R.H. Saunders generating station.

A revised First Nations and Métis Relations Policy was approved by OPG's Board of Directors on August 24, 2011. The focus of the Policy is on resolving past grievances and discussing hydroelectric, nuclear and thermal development opportunities with First Nations and Métis communities. The hydroelectric, nuclear and thermal business segments are currently implementing plans for community relations and outreach, employment and contracting opportunities, and capacity building initiatives with the surrounding First Nations and Métis communities.

Thermal Generating Assets

OPG's thermal stations can operate as baseload, intermediate and peaking facilities, depending on electricity demand. The ability of thermal units to start up and shut down on a daily basis through a wide range of their installed capacity provides Ontario's electricity system with the flexibility to meet changing daily system demand and capacity requirements, and enables the electricity system to accommodate the expansion of Ontario's renewable generation portfolio. Continued operation and staffing of coal-fired and other thermal generating units is required in a manner appropriate to their role of providing capacity to the electricity system when required. OPG's coal-fired generating stations produce the required volume of electricity and ancillary services while operating within the constraints of CO_2 emission limits, in a safe, environmentally responsible, reliable, and cost-effective manner.

The thermal business segment is on track to cease generation of electricity using coal by the end of 2014, while exploring options and the feasibility to convert some of the existing coal-fired units to burn alternate fuels such as natural gas and/or biomass. Converted thermal generating

stations can provide the Province with the continued flexibility of daily start up and shut down, the load-following capability to meet changing system needs, and complement non-dispatchable renewable energy sources.

The staff reduction challenges associated with the closure of two coal-fired units in 2011 were managed through the provisions of existing collective agreements, augmented with ongoing discussions and cooperation with union representatives. Continued staffing requirements are under review due to the changing operational profiles of the stations over the next three years.

Employee and public safety continues to be the thermal business segment's highest priority. Safety programs are based on the ISO 18000 Health and Safety managed system process and engineering risk assessments of plant systems. Through these managed systems and ongoing risk assessments, OPG places a priority on investments in work planning, staff training, and at-risk equipment to mitigate and eliminate health and safety, and production issues at its stations.

Environmental Performance

OPG's Environmental Policy states that "OPG will strive to continually improve its environmental performance." This policy commits OPG to meet all legal requirements and voluntary commitments, with the objective of exceeding those standards where appropriate and feasible. Other goals include integrating environmental factors into business planning and decision-making, and maintaining environmental management systems. Environmental performance targets also form part of the Corporate and Fleet Scorecards.

OPG manages air emissions of Nitrogen Oxides ("NO_x") and Sulphur Dioxide ("SO_2") through the use of specialized equipment such as scrubbers, low NO_x burners, Selective Catalytic Reduction ("SCR") equipment, and the purchase of low sulphur fuel.

OPG monitors emissions into the air and water and regularly reports the results to regulators including the Ministry of the Environment, Environment Canada, and the CNSC. The public also receives ongoing communications regarding OPG's environmental performance. OPG has developed and implemented internal monitoring, assessment, and reporting programs to manage environmental risks, such as air and water emissions, discharges, spills, the treatment of radioactive emissions, and radioactive wastes. OPG also continues to address historical land contamination through a voluntary land assessment and remediation program.

OPG's environmental performance for 2011 met or outperformed targets, regarding all spills, infractions, energy efficiency, production of radiological waste, and dioxins/furans emissions. OPG also maintained its ISO 14001 certification for its corporate level Environmental Management System and all of its generating stations. Acid gas (SO_2 and NO_x) emissions were 17.0 gigagrams ("Gg") in 2011 compared to 53.5 Gg in 2010. The decrease in acid gas emissions was primarily a result of decreased generation from OPG's thermal facilities. OPG's six coal-fired units with the highest acid gas emission rates were taken out of service in 2010 and 2011.

On August 27, 2011, Environment Canada issued its proposed greenhouse gas ("GHG") emissions regulation for a 60-day comment period. The *Reduction of Carbon Dioxide Emissions from Coal-Fired Generation of Electricity Regulations* will restrict CO_2 emissions from coal-fired stations based on the unit's age, starting in July 2015. Coal-fired units will be permitted to operate up until 45 years from their commissioning date. After 45 years, units must meet a CO_2 emission intensity limit of 375 Mg CO_2/GWh, which is expected to prevent continued coal-fired operation without significant modifications such as carbon capture and storage, or very high rates of biomass co-firing. Since OPG will no longer use coal to produce electricity after 2014, the regulation is not expected to affect OPG, including units to be converted to biomass or natural gas.

In July 2008, the Province of Ontario joined the Western Climate Initiative, committing to implement a GHG cap-and-trade regime by 2012. In the second quarter of 2011, the Province announced that the GHG cap-and-trade regime would be implemented after 2012, instead of in 2012 as originally planned. Provincial regulations passed in 2009 require facilities that emit 25,000 Mg of CO_2-equivalent emissions or more to monitor, measure, and report emissions. OPG will comply with the requirements and will continue to monitor developments of the GHG cap-and-trade regime.

To achieve further improvements in OPG's GHG emissions, OPG launched its Greenhouse Gas Management Plan in 2007. The plan focuses on: improving the energy efficiency of OPG's facilities, using biofuels as a partial replacement for coal, researching the impact of climate change on OPG's operations, expanding the tree planting effort through OPG's extensive biodiversity program, and providing an education program for employees.

In May 2008, the Province announced annual targets for CO_2 emissions from OPG's coal-fired generating stations. In accordance with the May 15, 2008 Shareholder Declaration and the May 16, 2008 Shareholder Resolution, OPG developed a strategy to meet, on a forecast basis, targets of CO_2 emissions arising from the use of coal of 19.6 million tonnes in 2009 and 15.6 million tonnes in 2010. OPG

satisfied the Shareholder Resolution by maintaining CO_2 arising from coal at levels below the 2009 and 2010 targets. In May 2010, the Province issued an additional Shareholder Declaration and Shareholder Resolution directing OPG to develop a strategy to meet, on a forecast basis, targets of CO_2 emissions arising from the use of coal of 11.5 million tonnes per year for the period 2011 to 2014. For 2011, CO_2 emissions were 4.2 million tonnes compared to 12.4 million tonnes for 2010. Emissions were significantly reduced during 2011 compared to 2010 as a result of lower generation from OPG's coal-fired generating stations. OPG continues to employ its CO_2 implementation strategy to meet the emission targets. Ontario regulation prevents OPG from using coal to produce electricity after 2014.

Safety

OPG is committed to achieving excellent safety performance, striving for continuous improvement and the ultimate goal of zero injuries. Safety performance is measured using two primary indicators: the ASR and the AIR. Overall, OPG's safety performance is consistently one of the best amongst Canadian electrical utilities with OPG achieving in 2011 the lowest ASR and AIR in its history.

OPG's 2011 ASR performance of 1.10 days lost per 200,000 hours is a 46 percent improvement over the 2010 ASR performance of 2.04 days lost per 200,000 hours. OPG's 2011 AIR of 0.56 injuries per 200,000 hours worked is a 39 percent improvement over the Company's 2010 AIR of 0.92 injuries per 200,000 hours worked. This reduction in injuries, coupled with the number of sites reaching major safety milestones with no lost time injuries, demonstrates OPG's progress towards reaching the goal of zero workplace injuries.

OPG is committed to achieve its goal of zero injuries and continuous improvement through maintenance of formal safety management systems at the corporate and site levels based on the British Standard Institution's Occupational Health and Safety Assessment Series 18001 ("OHSAS") Standard. These systems serve to focus OPG on proactively managing safety risks. Corporate-wide risk reduction priorities focused on improving falling object prevention programs, which resulted in fewer falling object incidents in 2011 than in 2010. Another priority initiative that will continue into 2012 is improving the application of work protection through simplification of processes. While improvement has been seen in reducing all injuries including musculoskeletal disorders, OPG remains focused on reaching its goal of zero injuries.

OPG believes that partnership with its unions is an important element of its strong safety culture and has embarked on a number of safety initiatives in 2011 including joint initiatives to improve falling object prevention and work protection processes. In October 2011, Joint Health and Safety Committee members from across the Province met in a joint forum to discuss their role regarding new regulatory requirements and to share lessons learned for common health and safety risks to implement at their respective sites.

Oversight and reporting by corporate and site safety functions provides senior management with regular information on the effectiveness of the safety management efforts, compliance with legal and corporate requirements, and safety performance trends. Oversight activities include internal and external safety management system audits and audits on specific operational risks. OPG also has a rigorous incident management system, which requires that all incidents, including near misses, be reported and investigated, and that corrective action plans are developed to ensure that reoccurrences are prevented.

Inherent in OPG's contractor management program is the expectation that its contractors maintain a level of safety equivalent to that of OPG's employees. Since 2005, OPG's AIR for construction contractors has compared favourably against the Ontario construction industry as measured by the Infrastructure Health and Safety Association.

Project Excellence

OPG is pursuing a number of generation development opportunities that are consistent with the Energy Plan. These include capacity expansion and life extension opportunities for existing stations, and the construction of new generating stations. Pursuing opportunities to leverage existing sites and assets allows OPG to realize benefits from these assets, and reduces the environmental impact of meeting Ontario's electricity demands. OPG's major projects include nuclear station refurbishment, new nuclear generation, Pickering B Continued Operations, new hydroelectric generation and plant upgrades, and the potential conversion of some of the coal-fired generating units to alternate fuels.

Darlington Refurbishment Project

In February 2010, OPG announced its decision to commence the definition phase for the refurbishment of the Darlington nuclear generating station. The Darlington generating units, based on original design assumptions, are currently forecast to reach their nominal end of life between 2019 and 2021. The objective of the refurbishment is to extend the operating life of the station by approximately 30 years.

Activities in the definition phase include the establishment of the project organization, scope finalization, engineering, planning and estimating, procurement of long lead items, establishment of key contracts, and facilities and infrastructure upgrades. A detailed cost and schedule estimate is expected to be completed in 2015 and construction is expected to start in 2016.

A Scope Review Board was established to review all major technical scope for the refurbishment, and the technical scope was finalized in 2011. The EA for the Darlington Refurbishment project, which forms the basis of the regulatory scope, was submitted to the CNSC in December 2011. As part of the EA process, OPG completed field and technical studies, and is finalizing the EIS and the associated Technical Support Documents. The preliminary assessment results have undergone external peer review by local municipalities and have also been shared with other key stakeholders.

In 2011, the final Integrated Safety Review ("ISR") was submitted to the CNSC. In February 2012, the CNSC completed a sufficiency review of the ISR and found the submission sufficient to begin the detailed technical assessment. The formal review of the ISR is expected to be completed by mid-2013.

On March 1, 2012, OPG awarded the retube and feeder replacement contract, which includes the planning, design, testing of tooling, design and construction of a full scale reactor mock-up facility for testing and training, and removal and replacement of major reactor components of the four reactors at the Darlington generating station. The contract will be completed in two phases – a definition phase and an execution phase. The contract value during the definition phase is estimated at over $600 million for a period of three to four years. The execution phase work, which is still to be estimated and valued, includes removal and replacement of the 480 pressure tubes and calandria tubes, and 960 feeder pipes for each of the station's four reactors. The contract is one of several contracts that are expected to be awarded for the refurbishment of the Darlington generating station.

Construction on the Darlington Energy Complex ("Complex") began in July 2011 and remains on track for occupancy in the fall of 2013. The Complex will house a training and calandria mock-up facility, warehouse, and office space to support the Darlington Refurbishment project. In the fourth quarter of 2011, OPG submitted the final draft of the Site Plan Agreement for stakeholder review, with final approval and sign-off expected in the first quarter of 2012. Discussions with the Central Lake Ontario Conservation Authority will ensue following the completion of the agreement with the Municipality of Clarington. Additional infrastructure related work, including upgrades to the water and sewer system, continues.

New Nuclear Units

The Government of Ontario, in its February 2011 Supply Mix Directive to the OPA, confirmed its commitment to the procurement of new nuclear units at Darlington. In addition, in the Supply Mix Directive, the Government of Ontario indicated two new nuclear units at the Darlington site would be procured provided that this can be achieved in a cost-effective manner.

The public hearings on the Darlington New Nuclear Project EA and application for "Licence to Prepare Site" began on March 21, 2011 and were completed on April 8, 2011. In August 2011, the Joint Review Panel overseeing the Darlington New Nuclear Project EA submitted its report to the federal Minister of the Environment. The Joint Review Panel concluded that the project is not likely to cause significant adverse environmental effects, given mitigation. The federal government will now prepare its response for approval by the Governor in Council, with a final determination of whether or not the EA should be accepted. The EA has been challenged by way of judicial review in the Federal Court of Canada on the grounds that the Joint Review Panel report failed to comply with requirements of the *Canadian Environmental Assessment Act*, and that the hearing deprived the applicants of certain procedural rights. OPG and the federal agencies have filed their affidavits.

Pickering B Continued Operations

OPG is undertaking a coordinated set of initiatives to evaluate the opportunity to continue the safe and reliable operation of its Pickering B nuclear generating station for approximately an additional four to six years beyond its nominal end of life. Work is progressing to finalize the scope of the program and to implement plant improvements. In 2011, OPG executed two major planned outages on its Units 5 and 6 reactors, completing necessary inspection campaigns and equipment improvements.

As part of a regulatory commitment to the CNSC, in 2010, OPG submitted the Continued Operations Plan to the CNSC which provided a detailed comprehensive operational plan to the station's end of life. At the March 2011 public meeting, the CNSC staff presented their review of the Pickering B Continued Operations Plan to the CNSC and identified no significant regulatory or safety issues. The year end update of the Pickering B Continued Operations Plan was submitted to the CNSC in December 2011 as required. OPG continues to progress with the coordinated set of initiatives undertaken to evaluate the opportunity for Pickering B Continued Operations. By the end of 2012, OPG expects to have completed the necessary work to demonstrate with sufficient confidence that the pressure tubes will achieve the additional life as predicted.

Deep Geologic Repository for Low and Intermediate Level Waste

In 2010, OPG approved the commencement of the detailed design phase of the Deep Geologic Repository ("DGR") project for the long-term management of L&ILW from OPG-owned nuclear generating stations. The Environmental Impact Statement ("EIS"), Preliminary Safety Report, and Technical Support Documents were submitted to the CNSC in April 2011. The purpose of these submissions is to obtain a Site Preparation and Construction License from the CNSC for the L&ILW DGR. On January 24, 2012, the CNSC and the Canadian Environmental Assessment Agency announced the appointment of a three member Joint Review Panel for OPG's DGR. The Joint Review Panel will conduct an examination of the environmental effects of the proposed DGR to meet the requirements of the *Canadian Environmental Assessment Act*. On February 3, 2012, the Joint Review Panel announced the start of the six month public review period on the submitted documents.

Niagara Tunnel

During 2011, the tunnel boring machine ("TBM") mining activity was completed. The disassembly of the machine is now in progress. Installation of the lower one-third of the permanent concrete lining had reached 7,625 metres by July 2, 2011 when this work was temporarily interrupted to do reinforcement repair work in the 6,050 metre area of the tunnel. This lining work resumed in February 2012. All other tunnel lining activities were uninterrupted. Restoration of the circular cross-section of the tunnel before installation of the upper two-thirds of the concrete lining has progressed 5,715 metres, and installation of the upper two-thirds of the concrete lining has progressed 5,112 metres. Contact grouting to fill the space between the concrete lining and impermeable membrane has progressed 2,337 metres, and pre-stress grouting to complete the attachment of the concrete liner with the surrounding rock commenced in August 2011, and at December 31, 2011, has progressed 1,037 metres.

Some uncertainty with respect to the cost and schedule for the liner installation will continue. Notwithstanding the uncertainty, the Niagara Tunnel is expected to be completed within the approved budget of $1.6 billion and the approved project completion date of December 2013. Upon completion of the project, the average annual generation from the Sir Adam Beck generating stations is expected to increase by approximately 1.6 TWh.

Capital project expenditures for 2011 were $264 million, and the life-to-date capital expenditures as of December 31, 2011 were $1.1 billion.

Lower Mattagami

During 2011, construction continued on the Lower Mattagami River project. At the Smoky Falls site, a cofferdam was installed and excavation, including additional rock consolidation work to remediate unanticipated geotechnical conditions, was completed. In addition, during the fourth quarter of 2011, a shelter was erected to allow operations to continue during the winter. At the Little Long site, as of December 31, 2011, cofferdam installation was completed, and concrete operations were 50 percent complete. Concrete operations had commenced at the Harmon site. At the Kipling site, cofferdam installation continued as of December 31, 2011.

The project budget of $2.6 billion includes the design-build contract as well as contingencies, interest, and other OPG costs, including project management, contract management, impact agreements with First Nations, and transmission connection costs. Capital project expenditures for 2011 were $474 million. Life-to-date expenditures as of December 31, 2011 were $766 million. The project is expected to be completed within the approved budget of $2.6 billion and is expected to be in service in June 2015. Upon completion, the project is expected to increase the capacity of the four stations on the Lower Mattagami River by 438 MW.

Conversion of Coal-Fired Units

The strategy to convert coal-fired units to alternative fuels such as biomass and/or natural gas continues to advance and is reflective of the options identified in the Energy Plan and Supply Mix Directive. Before OPG can proceed with unit conversions, a mechanism is required for recovery of capital and ongoing costs.

Atikokan Generating Station

The conversion of the Atikokan generating station to biomass is currently in the definition phase. OPG and the OPA are continuing to negotiate the Atikokan Biomass Energy Supply Agreement. OPG is proceeding with detailed engineering, and the negotiation of an engineering, procurement, and construction contract for the conversion of the Atikokan generating station to biomass fuel. The formal negotiation of fuel supply contracts began in October 2011 consistent with the progress of the ongoing energy supply agreement negotiations with the OPA.

Thunder Bay Generating Station

The conversion of two units at the Thunder Bay generating station to natural gas is currently in the definition phase. OPG continues to proceed with detailed engineering. In August 2011, the Minister of Energy issued a directive to the OPA to negotiate a long-term energy supply contract with OPG for the conversion of two coal-fired units at the

Thunder Bay generating station to natural gas. Discussions for a long-term supply contract with the OPA are ongoing. While an energy supply agreement is still required for the conversion, OPG has been requested by the Shareholder to continue the work associated with the required gas infrastructure consistent with the Energy Plan.

Other Coal-Fired Units

As outlined in the Energy Plan and Supply Mix Directive, OPG is also exploring the possible conversion of some units at the Lambton and Nanticoke generating stations to natural gas with an option for co-firing with biomass, if required for system reliability. Due to the long lead-time required for a gas pipeline to the Nanticoke site, Union Gas Limited has begun conducting technical and environmental studies and public consultation leading to the identification of the pipeline route. Similar pipeline routing studies are also being undertaken for Lambton.

Financial Sustainability

As an *Ontario Business Corporations Act* corporation with a commercial mandate, OPG's objective is to operate on a financially sustainable basis and maintain the value of its assets for its Shareholder – the Province.

OPG's priority, as a commercial enterprise, is to achieve and maintain a level of performance that will ensure its long-term financial sustainability. Inherent in this priority are the objectives of earning an appropriate return on its regulated and unregulated assets; identifying and exploring efficiency improvement opportunities; and ensuring a strong balance sheet that enhances OPG's ability to finance its operations and projects. OPG has employed a number of strategies to achieve a sustainable level of financial performance.

OPG receives regulated prices for electricity produced from its nuclear generating stations and most of its baseload hydroelectric generating stations. To ensure that the Company earns an appropriate return on its regulated assets, OPG's strategy is to clearly demonstrate to the OEB that its applications for regulated prices accurately reflect the costs required to safely and reliably operate the Prescribed Facilities, and deliver value to ratepayers.

A significant portion of OPG's generation is unregulated and continues to be sold at the Ontario spot electricity market price. To ensure appropriate revenues from these assets, OPG has negotiated long-term energy supply and cost recovery agreements for some of its generating stations. During the first quarter of 2012, OPG executed an extension to the LGSA. In addition, OPG is currently negotiating a number of energy supply and cost recovery agreements related to its thermal assets. Further information regarding generation development projects and the related agreements is discussed under the heading, *Project Excellence*.

OPG is initiating a process to identify and enhance efficiency which will evolve the Company's cost and revenue structure for future sustainability; and result in attracting more investment for generation and repowering projects. This process entails pursuing efficiencies through realigning work and streamlining processes which will allow OPG to continue to moderate the price of electricity for Ontario ratepayers, and to deliver greater value to Ontarians in the future.

To ensure that sufficient funds are available to achieve its strategic objectives of performance excellence and project excellence, OPG seeks to maximize funds generated from operations, and diversify its funding sources. By ensuring access to cost-effective funding and maintaining its investment grade credit ratings, OPG ensures its status as a long-term, commercially viable investment.

A key measure of financial sustainability is return on shareholder's equity. To improve its return on equity ("ROE"), OPG is pursuing opportunities to achieve appropriate levels of profitability while optimizing its capital structure. Total debt is maintained at a level that provides OPG with sufficient financial flexibility to issue debt as required. OPG also manages its capital structure by taking into consideration the financial metrics consistent with its current credit rating, and the deemed capital structure established by the OEB in setting regulated prices for the regulated operations.

CAPABILITY TO DELIVER RESULTS

OPG's capabilities to execute its corporate strategies and deliver results are impacted by a number of areas.

Generating Assets Reliability

OPG continues to implement specific initiatives to improve the reliability and predictability of each nuclear generating station. These initiatives are designed to address the specific technology requirements, operational experience, and mitigate risks. The Darlington nuclear generating station has converted to a three-year outage cycle to take advantage of the physical condition of the plant, the availability of backup systems, and on-power refuelling. The Pickering A and B nuclear generating stations will continue to focus on implementing targeted reliability improvements.

OPG has increased the productive capacity of its hydroelectric stations, and invested significant capital to replace aging equipment, upgrade runners, increase station automation, and enhance maintenance practices. Programs are in place to further improve the efficiency and availability of existing hydroelectric stations.

OPG will continue to maintain the reliability of its coal-fired generating stations to produce the electricity required until their scheduled closure dates, or upon conversion to alternative fuels.

Project Planning and Execution

OPG is pursuing and executing a number of generation development opportunities as described under the *Vision, Core Business and Strategy* section of the MD&A. In addition, OPG continues to plan and execute maintenance and capital improvement projects related to its existing assets. To achieve its strategy of project excellence, OPG must thoroughly plan, and successfully execute, in order to deliver projects on time and on budget.

Project excellence includes ensuring that OPG effectively utilizes the necessary talent and experience to efficiently plan and execute projects. The project planning and preparation process includes establishing contingency plans to manage potential challenges, creating and maintaining comprehensive risk registries, and establishing clear milestones at key stages of projects. In addition, project accountability is established at the appropriate level with appropriate oversight by senior management and Board Committee.

Operating Efficiencies

OPG is continuing to focus on cost reductions and efficiencies. This will be achieved through a restructuring of the Company that will combine the Hydroelectric and Thermal operations, restructure commercial operations to take advantage of market opportunities including surplus baseload generation, and create a scalable service delivery model for business support functions. OPG will move to a more integrated centre-led organization to further streamline operations.

This significant transformation will require a strong leadership team and change agents who can achieve the necessary culture change and efficiencies while continuing to operate OPG's generating assets in a safe and reliable manner.

Human Resources

OPG's resource strategy is to achieve its business transformation and operational objectives by accommodating attrition through the implementation of efficiency improvements to meet the future needs of the business. OPG will acquire and develop talent as is necessary to continue to drive change and build leadership bench strength. OPG also has an active succession planning program and continues to implement leadership development programs across the organization.

Electricity generation involves complex technologies, which demand highly skilled and trained workers. Many positions at OPG have significant educational prerequisites as well as rigorous requirements for continuing training and periodic requalification. In addition to maintaining its extensive internal training infrastructure, OPG relies on partnerships with government agencies, other electrical industry partners, and educational institutions to meet the required level of qualification.

As of December 31, 2011, OPG had approximately 11,400 full-time employees and approximately 700 contract, casual construction and non-regular staff. The majority of OPG's full-time employees are represented by two unions: approximately 6,600 employees by the Power Workers' Union (the "PWU") and approximately 3,600 employees by the Society of Energy Professionals ("The Society"). The current collective agreement between OPG and the PWU has a three-year term (April 1, 2009 – March 31, 2012). Currently, negotiations are underway with the PWU for a new labour agreement. The current collective agreement between OPG and The Society has a two-year term (January 1, 2011 to December 31, 2012).

In addition to the regular workforce, construction work is performed through 22 craft unions with established bargaining rights on OPG facilities. These bargaining rights are either through the Electrical Power Systems Construction Association ("EPSCA") or directly with OPG. Collective agreements between the Company and its construction unions are negotiated either directly or through EPSCA and have expiry dates ranging from 2013 to 2020.

ONTARIO ELECTRICITY MARKET TRENDS

In its 18-Month Outlook published on February 24, 2012, the Independent Electricity System Operator ("IESO") indicated that as of January 25, 2012, Ontario's installed electricity generating capacity was 34,079 MW. As of December 31, 2011, OPG's in-service electricity generating capacity was 19,051 MW, or about 56 percent of Ontario's capacity. The IESO reported that Ontario will continue to have adequate electricity supply. The anticipated completion of two Bruce nuclear unit refurbishments with 1500 MW of capacity, 400 MW of new gas-fired generation, and over 700 MW of new renewable generation contribute to the positive supply outlook. SBG is expected to increase in frequency and magnitude, as a result of two more nuclear units in service and the new Bruce to Milton transmission line. On December 31, 2011, OPG removed Nanticoke Units 1 and 2 from service as scheduled.

In its report, the IESO reported energy demand of 141.2 TWh during 2011. The IESO is forecasting demand for 2012 of 141.8 TWh. The decrease in demand is primarily attributable to ongoing global economic issues. The expected peak electricity demand during the summer, under normal weather conditions, is forecasted to be 23,345 MW in 2012. Additions of baseload generation from nuclear and renewable sources combined with declining off-peak demands are expected to increase the frequency and magnitude of SBG events beginning in the late spring of 2012 and persisting through the summer.

Fuel prices can have a significant impact on OPG's revenue and gross margin. Natural gas prices at Henry Hub averaged US $4.00/MMBtu in 2011, a decrease of 9 percent from the 2010 price of $4.39/MMBtu. The decrease in natural gas prices is mainly the result of an oversupplied North American market. Eastern coal prices averaged around $73.50/tonne in 2011, a decrease of 16 percent from 2010, while Powder River Basin coal prices averaged $13.70/tonne this year, a decrease of 5 percent. Soft power sector fundamentals and weak international coal markets have led to the overall moderation in coal prices.

The purchasing strategy of using a mix of spot and long-term contracts, a mix of fixed and market related pricing arrangements, and the long cycle time between acquiring uranium, processing it, fabricating fuel bundles and then expensing as fuel costs, tend to dampen the impact of short-term market fluctuations in uranium pricing on OPG. The industry average uranium spot market price ended the year at US $51.88 per pound which was a slight decrease from US $52.25 per pound at the end of the third quarter and a significant decrease from US $62.26 per pound at the beginning of 2011. The industry average long-term uranium price ended the year at US $62.00 per pound, a decrease from US $63.50 at the end of the third quarter and US $66.00 at the beginning of 2011.

BUSINESS SEGMENTS

OPG has five reportable business segments. The business segments are: Regulated – Nuclear Generation, Regulated – Nuclear Waste Management, Regulated – Hydroelectric, Unregulated – Hydroelectric, and Unregulated – Thermal.

In 2010, OPG had various energy and related sales contracts to hedge commodity price exposure to changes in electricity prices associated with the spot market for electricity in Ontario. Contracts that are designated as hedges of OPG's generation revenues are included in the Unregulated – Hydroelectric and Unregulated – Thermal generation segments. Gains or losses from these hedging transactions are recognized in revenue over the terms of the contract when the underlying transaction occurs. OPG did not enter into any energy and related sales contracts to hedge commodity price exposures during 2011.

Regulated – Nuclear Generation Segment

OPG's Regulated – Nuclear Generation business segment operates in Ontario, generating and selling electricity from the nuclear generating stations that it owns and operates. The business segment includes electricity generated by the Pickering A and B, and Darlington nuclear generating stations. This business segment also includes revenue under the terms of a lease arrangement and related agreements with Bruce Power related to the Bruce nuclear generating stations. This revenue includes lease revenue and revenue from services such as heavy water sales and detritiation. Revenue is also earned from isotope sales and ancillary services. Ancillary revenues are earned through voltage control and reactive support. Revenues from isotope sales and ancillary services are included in the computation of the regulated prices for OPG's nuclear facilities by the OEB.

Regulated – Nuclear Waste Management Segment

OPG's Regulated – Nuclear Waste Management segment engages in the management of used nuclear fuel and L&ILW, the decommissioning of OPG's nuclear generating stations (including the stations on lease to Bruce Power), the management of the Nuclear Funds, and related activities including the inspection and maintenance of the waste storage facilities. Accordingly, accretion expense on the Nuclear Liabilities and earnings from the Nuclear Funds are reported under this segment.

As the nuclear generating stations operate over time, OPG incurs variable costs related to nuclear used fuel and L&ILW generated. These costs increase the Nuclear Liabilities through the generation of additional used nuclear fuel bundles and other waste. These variable costs are charged to current operations in the Regulated – Nuclear Generation segment to reflect the cost of producing energy and earning revenue under the Bruce Power lease arrangement and related agreements. Since variable costs increase the Nuclear Liabilities in the Regulated – Nuclear Waste Management segment, OPG records an inter-segment charge between the Regulated – Nuclear Generation and the Regulated – Nuclear Waste Management segments. The impact of the inter-segment charge between these segments is eliminated on OPG's consolidated statements of income and balance sheets.

The Regulated – Nuclear Waste Management segment is considered regulated because the costs associated with the Nuclear Liabilities are included in the determination of regulated prices for production from OPG's regulated nuclear facilities by the OEB.

Regulated – Hydroelectric Segment

OPG's Regulated – Hydroelectric business segment operates in Ontario, generating and selling electricity from most of the Company's baseload hydroelectric generating stations. The business segment is comprised of electricity generated by the Sir Adam Beck 1, 2 and Pump generating station, DeCew Falls 1 and 2, and the R.H. Saunders hydroelectric facilities. Ancillary revenues are earned through offering available generating capacity as operating reserve and through the supply of other ancillary services including voltage control and reactive support, certified black start facilities, automatic generation control, and other services. These ancillary revenues are included in the computation of the regulated prices for these facilities by the OEB.

Unregulated – Hydroelectric Segment

The Unregulated – Hydroelectric business segment operates in Ontario, generating and selling electricity from its hydroelectric generating stations, which are not subject to rate regulation. Ancillary revenues are earned through offering available generating capacity as operating reserve, and the supply of other ancillary services including voltage control and reactive support, certified black start facilities, automatic generation control, and other services.

Unregulated – Thermal Segment

The Unregulated – Thermal business segment operates in Ontario, generating and selling electricity from its thermal generating stations, which are not subject to rate regulation. Ancillary revenues are earned through offering available generating capacity as operating reserve, and the supply of other ancillary services including voltage control and reactive support, automatic generation control, and other services.

Other

The Other category includes revenue that OPG earns from its 50 percent joint venture share of the Brighton Beach Power Limited Partnership ("Brighton Beach") related to an energy conversion agreement between Brighton Beach and Shell Energy North America (Canada) Inc. This category also includes revenue that OPG earns from its 50 percent share of the results of the PEC gas-fired generating station, which is co-owned with TransCanada Energy Ltd. and is operated under the terms of an Accelerated Clean Energy Supply contract with the OPA. The revenue and expenses related to OPG's trading and other non-hedging activities are also included in the Other category. As part of these activities, OPG transacts with counterparties in Ontario and neighbouring energy markets in predominantly short-term trading activities of typically one year or less in duration. These activities relate primarily to physical energy that is purchased and sold at the Ontario border, sales of financial risk management products and sales of energy-related products. All contracts that are not designated as hedges are recorded as assets or liabilities at fair value, with changes in fair value recorded in Other category revenue. In addition, the Other category includes revenue from real estate rentals.

KEY GENERATION AND FINANCIAL PERFORMANCE INDICATORS

Key performance indicators that directly pertain to OPG's mandate and corporate strategies are measures of production efficiency, cost-effectiveness, and environmental performance. OPG evaluates the performance of its generating stations using a number of key performance indicators, which vary depending on the generating technology. These indicators are defined in this section and are discussed in the *Discussion of Operating Results by Business Segment* section.

Nuclear Unit Capability Factor

OPG's nuclear stations are baseload facilities, as they have low marginal costs and are not designed for fluctuating production levels to meet peaking demand. The nuclear unit capability factor is a key measure of nuclear station performance. It is the amount of energy that the unit(s) generated over a period of time, adjusted for externally imposed constraints such as transmission or demand limitations, as a percentage of the amount of energy that would have been produced over the same period had the unit(s) produced maximum generation. Capability factors are primarily affected by planned and unplanned outages. Capability factors by industry definition exclude grid-related unavailability and high lake water temperature losses.

Thermal and Hydroelectric Equivalent Forced Outage Rate ("EFOR")

OPG's thermal stations provide a flexible source of energy and may operate as baseload, intermediate and peaking facilities, depending on the characteristics of the particular stations and demand of the market. OPG's hydroelectric

stations, which operate as baseload, intermediate, and peaking stations, provide a safe, reliable and low-cost source of renewable energy. A key measure of the reliability of the thermal and hydroelectric generating stations is the proportion of time they are available to produce electricity when required. EFOR is an index of the reliability of the generating unit measured by the ratio of time a generating unit is forced out of service by unplanned events, including any forced deratings, compared to the amount of time the generating unit was available to operate.

OPG continues its strategy for its thermal stations to ensure units are available when they are required, and to optimize how coal-fired units are offered into the electricity system, to reduce equipment damage from frequent starts and stops. In addition, OPG has optimized outage duration and scope, where warranted, commensurate with capped unit production due to CO_2 emission limits, reduced system demands and planned future plant operation, to reduce maintenance related expenditures, including capital asset investments, labour and overtime. Thermal EFOR for 2011 reflected this strategy.

Given continued changes in the electricity market in Ontario, the main focus of the thermal business is to provide capacity when needed. The EFOR performance measure has become less meaningful as a measure of performance. In 2012, the thermal business will adopt Start Guarantee as its key performance measure. It represents the ratio of starts submitted to the IESO qualifying for start guarantee payments, compared to the number of payments not received when thermal units did not synchronize on time or meet minimum requirements for success. The thermal business has been monitoring Start Guarantee performance in 2011 in anticipation of this change.

Hydroelectric Availability

Hydroelectric availability is a measure of the reliability of a hydroelectric generating unit. It is represented by the percentage of time the generating unit is capable of providing service, whether or not it is actually in-service, compared to the total time for a respective period.

Nuclear Production Unit Energy Cost ("PUEC")

Nuclear PUEC is used to measure the cost-effectiveness of the operations-related costs of production of OPG's nuclear generating assets. Nuclear PUEC is defined as the total cost of nuclear fuel, OM&A expenses including allocated corporate costs and the variable costs for the disposal of L&ILW materials, and variable costs related to used fuel disposal and storage, divided by nuclear electricity generation.

Hydroelectric OM&A Expense per MWh

Hydroelectric OM&A expense per MWh is used to measure the cost-effectiveness of the hydroelectric generating stations. It is defined as total hydroelectric OM&A expenses excluding expenses related to past grievances by First Nations, and including allocated corporate costs, divided by hydroelectric electricity generation.

Thermal OM&A Expense per MW

Since thermal generating stations are primarily employed during periods of intermediate and peak demand, the cost-effectiveness of these stations is measured by their annualized OM&A expenses for the period, including allocated corporate costs, divided by the weighted average station adjusted capacity.

Return on Equity

ROE is an indicator of OPG's performance consistent with its objectives to operate on a financially sustainable basis and to maintain the value for the Shareholder. ROE is defined as net income divided by average shareholder's equity excluding accumulated other comprehensive income. This measure is not a defined term under Canadian GAAP. See ROE as calculated under the heading, *Supplementary Non-GAAP Financial Measures*, for further details.

This key performance indicator is not a measurement in accordance with Canadian GAAP and should not be considered as an alternative measure to net income or any other measure of performance under Canadian GAAP. OPG believes that this non-GAAP financial measure is an effective indicator of its performance and is consistent with the objectives to operate on a financially sustainable basis and to maintain the value for the Shareholder.

Other Key Indicators

In addition to performance and cost-effectiveness indicators, OPG has identified certain environmental indicators. These indicators are discussed under the heading, *Risk Management*.

DISCUSSION OF OPERATING RESULTS BY BUSINESS SEGMENT

This section summarizes OPG's key results by segment for 2011 and 2010. The following table provides a summary of revenue, earnings, and electricity generation by business segment:

(millions of dollars – except where noted)	2011	2010
Revenue		
Regulated – Nuclear Generation	**3,064**	3,030
Regulated – Nuclear Waste Management	**57**	45
Regulated – Hydroelectric	**729**	734
Unregulated – Hydroelectric	**492**	497
Unregulated – Thermal	**608**	936
Other	**166**	168
Elimination	**(55)**	(43)
	5,061	5,367
Income (loss) before interest and income taxes		
Regulated – Nuclear Generation	**361**	302
Regulated – Nuclear Waste Management	**(194)**	8
Regulated – Hydroelectric	**341**	316
Unregulated – Hydroelectric	**110**	129
Unregulated – Thermal	**(132)**	(68)
Other	**106**	78
	592	765
Electricity generation *(TWh)*		
Regulated – Nuclear Generation	**48.6**	45.8
Regulated – Hydroelectric	**19.5**	18.9
Unregulated – Hydroelectric	**12.9**	11.7
Unregulated – Thermal	**3.7**	12.2
Total electricity generation	**84.7**	88.6

Regulated – Nuclear Generation Segment

(millions of dollars)	2011	2010
Regulated generation sales	**2,691**	2,499
Variance accounts	**48**	260
Other	**325**	271
Total revenue	**3,064**	3,030
Fuel expense	**256**	215
Variance accounts	**(13)**	(30)
Total fuel expense	**243**	185
Gross margin	**2,821**	2,845
Operations, maintenance and administration	**1,964**	2,104
Depreciation and amortization	**473**	398
Property and capital taxes	**26**	39
Income before other (gains) losses, interest, and income taxes	**358**	304
Other (gains) losses	**(3)**	2
Income before interest and income taxes	**361**	302

Income before interest and income taxes from the Regulated – Nuclear generation segment was $361 million in 2011 compared to $302 million in 2010. The increase in income before interest and income taxes was primarily due to higher generation revenue and lower OM&A expenses, partially offset by lower revenue related to regulatory variance accounts, higher depreciation and amortization expense, and an increase in fuel expense.

The increase in generation revenue in 2011 of $192 million compared to 2010 was primarily due to a higher generation volume of 2.8 TWh primarily as a result of the excellent performance of the Darlington generating station, with a decrease in the number of planned and unplanned outage days in 2011 compared to 2010.

The decrease in revenue related to the regulatory variance accounts of $212 million in 2011 compared to 2010 was primarily related to the cessation of additions to the Tax Loss Variance Account, effective March 1, 2011, based on the OEB's March 2011 decision. The Tax Loss Variance Account recorded the difference between the amount of mitigation included in the approved regulated prices in effect prior to March 1, 2011 and the revenue requirement reduction available from tax losses recalculated as per the OEB's 2008 decision on regulated prices.

The decrease in revenue related to the regulatory variance accounts was also due to the Bruce Lease Net Revenues Variance Account. The conditional reduction to revenue in the future, embedded in the terms of the Bruce Power lease agreement ("Bruce Lease"), is treated as a derivative

according to CICA Handbook Section 3855, *Financial Instruments – Recognition and Measurement* ("Section 3855"). Derivatives are measured at fair value and changes in fair value are recognized in the consolidated statements of income. As a result of a decrease in the expected future annual arithmetic average of the Hourly Ontario Electricity Price ("Average HOEP") during 2011, the fair value of the derivative liability increased to $186 million at December 31, 2011 compared to $163 million at December 31, 2010, an increase of $23 million. For 2010, the increase in the fair value of the derivative liability embedded in the Bruce Lease was $45 million. Since the changes in the fair value of this derivative are recorded in non-electricity generation revenue with a corresponding change in the regulatory asset related to the Bruce Lease Net Revenues Variance Account, there is no income impact related to the change in the fair value of the derivative liability.

The increase in depreciation and amortization expense of $75 million in 2011 compared to 2010 was primarily due to higher amortization expense related to the recovery of regulatory balances as a result of the OEB's March 2011 decision on the new regulated prices.

Fuel expense for 2011 was $243 million compared to $185 million in 2010. The increase in fuel expense in 2011 was primarily due to the impact of the regulatory variance account related to nuclear fuel costs, which was discontinued by the OEB effective March 1, 2011, and higher nuclear fuel prices and generation volumes in 2011.

OM&A expenses for 2011 were $1,964 million compared to $2,104 million in 2010. The decrease in OM&A expenses of $140 million was primarily due to lower planned outage and project activities, and a decrease in expenditures for new nuclear generation development and capacity refurbishment activities, net of the impact of related regulatory variance accounts. The decrease in OM&A expenses was partially offset by higher pension and OPEB costs, net of the impact of the Pension and OPEB Cost Variance Account, and higher maintenance costs. The increase in pension and OPEB costs was largely a result of lower discount rates in 2011.

The unit capability factors for each of the nuclear stations and the PUEC for 2011 and 2010 are as follows:

	2011	2010
Unit Capability Factor *(%)*		
Darlington	**95.2**	87.6
Pickering A	**67.9**	62.4
Pickering B	**76.2**	76.3
Nuclear PUEC *($/MWh)*	**43.79**	47.04

In 2011, the higher capability factor at the Darlington generating station compared to 2010 was primarily due to a decrease in both the planned and unplanned outage days. The higher capability factor at the Pickering A generating station for 2011 compared to 2010 reflected the lower planned outage days at the station in 2011, primarily due to the Pickering Vacuum Building Outage ("VBO") in 2010, partially offset by higher unplanned outage days in 2011. The lower capability factor at the Pickering B generating station in 2011 compared to 2010 primarily reflected higher unplanned outage days in the fourth quarter of 2011, partially offset by lower planned outage days in 2011.

The decrease in Nuclear PUEC in 2011 compared to 2010 was primarily due to higher generation and lower OM&A expenses, partially offset by higher fuel expense.

Regulated – Nuclear Waste Management Segment

(millions of dollars)	**2011**	2010
Revenue	**57**	45
Operations, maintenance and administration	**65**	52
Accretion on fixed asset removal and nuclear waste management liabilities	**695**	653
Earnings on nuclear fixed asset removal and nuclear waste management funds	**(509)**	(668)
(Loss) income before interest and income taxes	**(194)**	8

Loss before interest and income taxes for the Regulated – Nuclear Waste Management Segment was $194 million in 2011 compared to income before interest and income taxes of $8 million in 2010. The decrease in income in 2011 compared to 2010 was primarily due to lower earnings from the Nuclear Funds and higher accretion expense.

Earnings from the Nuclear Funds in 2011 were $509 million compared to $668 million in 2010. The earnings from the Nuclear Funds, before the impact of the Bruce Lease Net Revenues Variance Account, were $461 million in 2011 compared to $836 million in 2010, a decrease of $375 million. The decrease in earnings from the Nuclear Funds was primarily due to lower earnings from the Decommissioning Fund resulting from a decline in the valuation levels of global financial markets in the third quarter of 2011. In 2011, OPG recorded an increase to the Bruce Lease Net Revenues Variance Account regulatory asset of $48 million, which resulted in an increase to the total reported earnings from the Nuclear Funds. In 2010, OPG recorded a decrease to the Bruce Lease Net Revenues Variance regulatory asset of $168 million related to the earnings from the Nuclear Funds.

The increase in accretion expense in 2011 compared to 2010 was primarily due to an increase in the present value of the Nuclear Liabilities due to the passage of time.

Regulated – Hydroelectric Segment

(millions of dollars)	2011	2010
Regulated generation sales[1]	684	697
Variance accounts	13	5
Other	32	32
Revenue	729	734
Fuel expense	263	254
Variance accounts	(2)	(8)
Total fuel expense	261	246
Gross margin	468	488
Operations, maintenance and administration	108	99
Depreciation and amortization	38	62
Property and capital taxes	–	11
Income before other gains, interest, and income taxes	322	316
Other gains	19	–
Income before interest and income taxes	341	316

1 During the years ended December 31, 2011 and 2010, the Regulated – Hydroelectric segment generation sales included revenue related to the HIM of $15 million and $14 million, respectively.

In 2011, income before interest and income taxes for the Regulated – Hydroelectric segment was $341 million compared to $316 million in 2010. The increase in income was primarily due to lower depreciation and amortization expense and other gains as a result of a reduction to an environmental provision, and lower property and capital taxes expense primarily as a result of the elimination of capital tax as of July 2010. The increase was partially offset by a lower gross margin and higher OM&A expenses. Gross margin decreased in 2011 compared to 2010 primarily due to lower prices resulting from the OEB's March 2011 decision, partially offset by an increase in electricity generation of 0.6 TWh.

The increase in fuel expense in 2011 compared to 2010 was primarily due to higher generation volume.

The decrease in depreciation and amortization expense was primarily due to lower amortization expense related to regulatory balances as a result of the OEB's March 2011 decision.

OM&A expenses for the year ended December 31, 2011 were $108 million compared to $99 million in 2010. The increase in OM&A expenses for 2011 compared to 2010 was primarily due to an increase in maintenance activities, and higher pension and OPEB costs net of the impact of the related regulatory variance account.

The availability, EFOR and OM&A expense per MWh for the Regulated – Hydroelectric segment for 2011 and 2010 are as follows:

	2011	2010
Availability *(%)*	89.7	92.8
EFOR *(%)*	1.3	0.3
Regulated – Hydroelectric OM&A expense per MWh *($/MWh)*	5.54	5.24

The decrease in availability in 2011 compared to 2010 was primarily due to an increase in planned maintenance activities and unplanned outages in 2011. The continuing high availability and low EFOR reflected the strong performance of these hydroelectric stations.

The increase in OM&A expense per MWh for the year ended December 31, 2011 compared to the same period in 2010 was due to higher OM&A expenses, partially offset by higher generation.

Unregulated – Hydroelectric Segment

(millions of dollars)	2011	2010
Spot market sales, net of hedging instruments	412	449
Other	80	48
Total revenue	492	497
Fuel expense	75	64
Gross margin	417	433
Operations, maintenance and administration	236	230
Depreciation and amortization	75	70
Property and capital taxes	(2)	4
Income before other gains, interest, and income taxes	108	129
Other gains	2	–
Income before interest and income taxes	110	129

Income before interest and income taxes in 2011 was $110 million compared to $129 million in 2010. The decrease in income was primarily due to lower generation revenue and higher fuel expense, partially offset by an increase in other revenue.

Revenue from spot market sales decreased by $37 million in 2011 compared to 2010 primarily due to the impact of lower average HOEP in 2011, partially offset by higher electricity generation during 2011 due to higher water flows. Other revenue increased by $32 million in 2011 compared to 2010

primarily as a result of additional revenue from an energy supply agreement related to the Upper Mattagami generating stations. These stations were placed in service during the fourth quarter of 2010.

The increase in fuel expense in 2011 compared to 2010 was primarily due to higher generation volume.

The availability, EFOR and OM&A expense per MWh for Unregulated – Hydroelectric segment for 2011 and 2010 are as follows:

	2011	2010
Availability *(%)*	**91.5**	91.6
EFOR *(%)*	**1.6**	2.1
Unregulated – Hydroelectric OM&A expense per MWh *($/MWh)*	**17.91**	17.95

Availability in 2011 and 2010 was 91.5 percent and 91.6 percent, respectively. EFOR decreased in 2011 compared to 2010 primarily as a result of a decrease in unplanned outages at the Northeast and Ottawa St. Lawrence Plant Groups. The high availability and low EFOR reflected the continuing strong performance of the hydroelectric stations.

The decrease in OM&A expense per MWh in 2011 compared to 2010 was primarily due to the impact of higher generation, partially offset by higher OM&A expenses.

Unregulated – Thermal Segment

(millions of dollars)	2011	2010
Spot market sales, net of hedging instruments	**123**	530
Contingency support agreement	**363**	258
Other	**122**	148
Revenue	**608**	936
Fuel expense	**175**	405
Gross margin	**433**	531
Operations, maintenance and administration	**414**	453
Depreciation and amortization	**88**	99
Accretion on fixed asset removal liabilities	**7**	7
Property and capital taxes	**15**	13
Restructuring due to coal unit closures	**21**	27
Loss before other losses, interest, and income taxes	**(112)**	(68)
Other losses	**(20)**	–
Loss before interest and income taxes	**(132)**	(68)

Loss before interest and income taxes in 2011 was $132 million compared to $68 million in 2010. The increase in the losses before interest and income taxes was primarily due to a lower gross margin and a loss related to a change in the Asset Retirement Obligation ("ARO") estimate in 2011, which was reported as other losses. These reductions in income were partially offset by a decrease in OM&A and depreciation expenses in 2011 compared to 2010.

Gross margin decreased in 2011 compared to 2010 primarily due to a significant reduction in generation volume of 8.5 TWh and lower electricity sales prices. The gross margin in 2011 was also unfavourably impacted by higher fuel-related costs pertaining to favourable adjustments in coal inventory in 2010, and expenditures due to adjustments to coal supply contracts in 2011. These decreases in gross margin were partially offset by higher revenue related to the contingency support agreement for the Nanticoke and Lambton generating stations.

In September 2011, OPG completed a review of the ARO for most of its thermal stations. As a result of this review, the ARO estimate has increased, resulting in a loss of $18 million being recorded in the Thermal business segment for 2011. A gain related to the decommissioned R.L. Hearn generating station is included in the Other category. The net impact of the review is discussed in the *Changes in Accounting Policies and Estimates* section.

The reduction in OM&A expenses in 2011 compared to 2010 was primarily due to the continuation of the vacancy and overtime management program, and reduced scope of work associated with changing operating profiles and unit closures at Nanticoke in 2011.

Depreciation and amortization expense decreased in 2011 compared to 2010 due to the recognition of accelerated depreciation related to four unit closures in 2010 compared to accelerated depreciation for two units in 2011.

Restructuring charges of $21 million were recorded during 2011 due to the recognition of severance costs related to the closure of two additional coal-fired units at the Nanticoke generating station in 2011. During 2010, restructuring charges of $27 million were recognized related to the closure of four coal-fired units in 2010.

The EFOR and OM&A expense per MW for Unregulated – Thermal segment for 2011 and 2010 are as follows:

	2011	2010
EFOR *(%)*	**9.2**	7.3
Unregulated – Thermal OM&A expense per MW *($000/MW)*	**66.30**	59.00

The higher EFOR in 2011 compared to 2010 was primarily due to a higher number of unplanned outage days at the Nanticoke and Lambton generating stations. The higher number of unplanned outage days was expected given the implementation of a management strategy, which entails managing outage expenditures, duration, and scope while ensuring the units are available as required during a period of reduced production.

The increase in OM&A expense per MW during 2011 compared to 2010 reflected the reduction in OPG's thermal generating capacity in late 2010 resulting from the unit closures and the reduction in capacity at the Nanticoke generating station during the second quarter of 2011, partially offset by lower OM&A expenses in 2011.

Other

(millions of dollars)	2011	2010
Revenue	**166**	168
Operations, maintenance and administration	**24**	18
Depreciation and amortization	**49**	59
Property and capital taxes	**12**	10
Income before other (gains) losses, interest, and income taxes	**81**	81
Other (gains) losses	**(25)**	3
Income before interest and income taxes	**106**	78

Income before interest and income taxes for the Other category in 2011 was $106 million compared to $78 million in 2010. The increase in income was primarily due to gains recognized as a result of the review of the ARO for OPG's thermal stations in 2011. The ARO associated with the decommissioned R.L. Hearn generating station was reduced, resulting in a gain of $20 million being recorded in the Other category.

OM&A expenses of the generation business segments include an inter-segment service fee for the use of certain property, plant and equipment, and intangible assets held within the Other category. The total service fee is recorded as a reduction to the Other category's OM&A expenses. The service fee included in OM&A expenses by segment in 2011 and 2010 was as follows:

(millions of dollars)	2011	2010
Regulated – Nuclear Generation	**22**	25
Regulated – Hydroelectric	**2**	2
Unregulated – Hydroelectric	**4**	3
Unregulated – Thermal	**7**	8
Other	**(35)**	(38)

Interconnected purchases and sales, including those to be physically settled, and unrealized mark-to-market gains and losses on energy trading contracts, are disclosed on a net basis in the consolidated statements of income. In 2011 and 2010, if disclosed on a gross basis, revenue and power purchases would have increased by $69 million.

With the exception of the derivative embedded in the Bruce Lease, which is reflected in the Regulated – Nuclear Generation segment, the changes in the fair values of derivative instruments not qualifying for hedge accounting are recorded in revenue, and the fair values of derivative instruments are carried on the consolidated balance sheets as assets or liabilities. The carrying amounts and notional quantities of the derivative instruments are disclosed in Note 13 in the audited annual consolidated financial statements as at and for the years ended December 31, 2011 and 2010.

Net Interest Expense

Net interest expense for 2011 was $165 million compared to $176 million for 2010, a decrease of $11 million. The decrease was primarily due to higher interest income from short-term investments and a lower average interest rate on long-term debt.

Income Taxes

OPG follows the liability method of tax accounting for all its business segments and records an offsetting regulatory asset or liability for the future taxes that are expected to be recovered or refunded through future regulated prices charged to customers for generation by OPG's regulated facilities.

Income tax expense for 2011 was $11 million compared to income tax recovery of $60 million for 2010. The increase in income tax expense was largely due to higher income before earnings from the Nuclear Funds in 2011. Earnings from the Nuclear Funds are not taxable until withdrawn.

The OEB's decision in 2011 on OPG's regulated prices authorized the continuation of the Income and Other Taxes Variance Account. The account captures variances in the income tax, capital tax, and certain other tax-related expenses for the regulated business from those approved by the OEB in setting regulated prices caused by changes in tax rates or rules under the *Income Tax Act* (Canada) and the *Taxation Act, 2007* (Ontario), as modified by the regulations made under the *Electricity Act, 1998*, as well as variances caused by reassessments. Variances in income tax expense from reassessments of prior taxation years that have an impact on taxes payable related to regulated operations for the periods after March 31, 2008 are included in the account. In addition, the variance account captures certain changes in property tax expense.

In 2011 and 2010, OPG recorded an increase of $27 million and $19 million, respectively, to the regulatory liability for the Income and Other Taxes Variance Account primarily related to the impact of investment tax credits for eligible scientific research and experimental development expenditures, reassessments of certain prior taxation years, and lower than forecast statutory corporate income and capital tax rates. The impact of the variance account is recorded in the income statement line which reflects the nature of the underlying item which gave rise to the variance. As a result, during 2011, OPG recorded additional OM&A expenses of $22 million, $2 million each of additional capital and income tax expenses, and $1 million of additional interest expense. During 2010, OPG recorded additional OM&A expenses of $14 million, an additional capital tax expense of $11 million, and a reduction in income tax expense of $6 million.

Return on Equity

ROE is a non-GAAP financial measure as defined under the heading, *Key Generation and Financial Performance Indicators*, and as calculated under the heading, *Supplementary Non-GAAP Financial Measures*.

ROE for 2011 was 5.0 percent compared to 8.3 percent in 2010. The decrease in ROE was primarily due to lower net income in 2011 compared to 2010. The lower net income was primarily due to lower earnings from the Nuclear Funds, a reduction in revenue related to amounts recorded in a regulatory variance account associated with tax losses, an increase in pension and other post-employment benefit costs, largely as a result of lower discount rates, and the impact of lower Ontario spot electricity market prices on the Unregulated – Hydroelectric business segment. These reductions were partially offset by an increase in generation at OPG's nuclear generating stations, and lower OM&A expenses.

LIQUIDITY AND CAPITAL RESOURCES

OPG's primary sources of liquidity and capital are funds generated from operations, bank financing, credit facilities provided by the OEFC, and capital market financing. These sources are utilized for multiple purposes including: investments in plants and technologies; funding obligations such as contributions to the pension funds and the Used Fuel and Decommissioning Funds; and to service and repay long-term debt.

Changes in cash and cash equivalents for 2011 and 2010 are as follows:

(millions of dollars)	2011	2010
Cash and cash equivalents, beginning of year	**280**	71
Cash flow provided by operating activities	**990**	817
Cash flow used in investing activities	**(1,138)**	(945)
Cash flow provided by financing activities	**510**	337
Net increase	**362**	209
Cash and cash equivalents, end of year	**642**	280

Operating Activities

Cash flow provided by operating activities for 2011 was $990 million compared to $817 million for 2010. The increase in cash flow was primarily due to lower OM&A expenditures, lower fuel purchases, and lower tax instalments. This increase was partially offset by lower cash receipts as a result of lower generation revenue in 2011 compared to 2010.

Investing Activities

Electricity generation is a capital-intensive business that requires continued investment in plant and technologies to improve operating performance, increase generating capacity of existing stations, invest in new generating stations, and to maintain and improve service, reliability, safety and environmental performance.

Cash flow used in investing activities for 2011 was $1,138 million compared to $945 million for 2010. The increase in cash flow used in investing activities for 2011 compared to 2010 was primarily due to higher expenditures for the Lower Mattagami project, the Darlington Refurbishment project, and the Niagara Tunnel project. This increase was partially offset by lower capital expenditures for the Upper Mattagami and Hound Chute project, which was placed in service in the fourth quarter of 2010, and other nuclear projects.

OPG's forecast capital expenditures for 2012 are approximately $1.6 billion, which includes amounts for hydroelectric development and nuclear refurbishment.

Financing Activities

As at December 31, 2011, OPG maintains a $1 billion revolving committed bank credit facility, which is divided into two $500 million multi-year term tranches. In May 2011, OPG renewed and extended one $500 million tranche to May 18, 2015. The other $500 million tranche has a maturity date of May 20, 2013. The total credit facility will continue to be used primarily as credit support for notes issued under OPG's commercial paper program. As at December 31, 2011, no commercial paper was outstanding under this facility. OPG had no other outstanding borrowings under the bank credit facility as at December 31, 2011.

As at December 31, 2011, OPG maintained $25 million of short-term, uncommitted overdraft facilities, and $353 million of short-term, uncommitted credit facilities, which support the issuance of the Letters of Credit. OPG uses Letters of Credit to support its supplementary pension plans, and for other purposes. As at December 31, 2011, there was a total of $305 million of Letters of Credit issued, which included $287 million for the supplementary pension plans, $17 million for general corporate purposes and $1 million related to the operation of the PEC.

In accordance with CICA Handbook Accounting Guideline 15, *Consolidation of Variable Interest Entities*, the applicable amounts in the accounts of the Nuclear Waste Management Organization ("NWMO") are included in OPG's consolidated financial statements as OPG is the primary beneficiary of the NWMO. As at December 31, 2011, the NWMO has issued a $3 million Letter of Credit for its supplementary pension plan.

During 2010, OPG executed an amended Niagara Tunnel project credit facility for an amount up to $1.6 billion. As at December 31, 2011, advances under this facility were $875 million, including $185 million of new borrowing during 2011.

During 2010, the Lower Mattagami Energy Limited Partnership ("LME") established a $700 million bank credit facility to support the initial construction phase for the Lower Mattagami project and the commercial paper program. As at December 31, 2011, $10 million of commercial paper was outstanding under this program (December 31, 2010 – $155 million). In March 2011, OPG executed a $700 million credit facility with the OEFC in support of the Lower Mattagami project. As at December 31, 2011, there were no outstanding borrowings under this credit facility. On May 17, 2011, senior notes totalling $475 million were issued by the LME, of which $225 million mature in 2021 and $250 million mature in 2041. On October 25, 2011, senior notes totalling $96 million maturing in 2015 were issued by the LME.

The Company has an agreement to sell an undivided co-ownership interest up to $250 million in its current and future accounts receivable to an independent trust which expires August 31, 2013. In December 2011, in accordance with the receivable purchase agreement, OPG reduced the securitized receivable balance from $250 million to $50 million. As at December 31, 2011, the securitized receivable balance was $50 million (December 31, 2010 – $250 million).

As at December 31, 2011, OPG's long-term debt outstanding was $4,897 million. To ensure that adequate financing resources were available beyond its $1 billion commercial paper program backed by the revolving committed bank credit facility, OPG reached an agreement with the OEFC in March 2011 for a $375 million credit facility to refinance notes as they matured over the period from January 2011 to December 2011. Refinancing under this agreement totalled $300 million as at December 31, 2011.

During the third quarter of 2011, OPG settled a claim and arbitration with a certain First Nation in one settlement agreement. OPG was directed by its Shareholder to pay a part of the Shareholder's portion of the settlement liability on its behalf. As a result, OPG recorded a distribution of $14 million to the First Nation, which was recorded as a reduction to retained earnings in the third quarter of 2011. This settlement did not have a material impact on the Company's financial position.

Contractual and Commercial Commitments

OPG's contractual obligations and other significant commercial commitments as at December 31, 2011, are as follows:

(millions of dollars)	2012	2013	2014	2015	2016	Thereafter	Total
Contractual obligations:							
Fuel supply agreements	227	191	171	170	113	334	1,206
Contributions under the ONFA[1]	240	157	94	96	84	578	1,249
Long-term debt repayment	415	14	15	605	286	3,568	4,903
Interest on long-term debt	239	223	222	215	200	1,300	2,399
Unconditional purchase obligations	103	102	101	99	11	37	453
Operating lease obligations	27	30	30	32	31	–	150
Operating licence	36	36	36	1	1	–	110
Pension contributions[2]	370	315	–	–	–	–	685
Other[3]	98	41	92	37	17	117	402
Significant commercial commitments:	1,755	1,109	761	1,255	743	5,934	11,557
Niagara Tunnel	176	40	–	–	–	–	216
Lower Mattagami	546	490	181	38	–	–	1,255
Total	2,477	1,639	942	1,293	743	5,934	13,028

1 Contributions under the ONFA are based on the 2007 – 2011 reference plan approved in 2006.

2 The pension contributions include ongoing funding requirements, and additional funding requirements towards the deficit, in accordance with the actuarial valuations of the OPG and NWMO registered pension plans as at January 1, 2011. The next actuarial valuations of the OPG and NWMO plans must have effective dates no later than January 1, 2014 and 2012, respectively. The pension contributions are affected by various factors including market performance, changes in actuarial assumptions, plan experience, changes in the pension regulatory environment, and the timing of funding valuations. Funding requirements after 2013 are excluded due to significant variability in the assumptions required to project the timing of future cash flows.

3 Includes contractual obligations related to the Darlington Refurbishment project up to March 2, 2012.

An actuarial valuation of the OPG registered pension plan was completed as of January 1, 2011. Based on the actuarial valuation, OPG increased its annual contribution to the plan from $270 million in 2010 to $300 million in 2011. For 2012, OPG's contribution is expected to be $370 million. The estimated contribution for 2013 of $315 million is based on the 2011 contribution adjusted for the expected change in current service cost. The amount of OPG's additional voluntary contribution, if any, is revisited on an annual basis. OPG will continue to assess the requirements for contributions to the pension plan. The next actuarial valuation for funding purposes must have an effective date no later than January 1, 2014.

CREDIT RATINGS

Maintaining an investment grade credit rating is essential for corporate liquidity and future capital market access. The cost and availability of financing are influenced by credit ratings, which are an indicator of the creditworthiness of a particular company, security or obligation. Lower ratings generally result in higher borrowing costs as well as reduced access to capital markets.

In February 2012, Standard & Poor's affirmed the long-term credit rating on OPG at A- with a stable outlook and the commercial paper rating at A-1 (low). In December 2011, Dominion Bond Rating Service affirmed the long-term credit rating on OPG at A (low) and the commercial paper rating at R-1 (low) with a stable outlook. These ratings reflect OPG's strong financial profile.

BALANCE SHEET HIGHLIGHTS

The following section provides highlights of OPG's audited consolidated financial position using selected balance sheet data as at December 31:

(millions of dollars)	2011	2010	Explanation of change
Accounts receivable	**461**	270	The increase was primarily due to the reduction of the securitized receivable balance from $250 million to $50 million, resulting in an increase in the receivables retained by OPG.
Property, plant and equipment – net	**15,075**	13,555	The increase was primarily due to an increase in the estimate for the liability for nuclear fixed asset removal and nuclear waste management of $934 million resulting from the ONFA Reference Plan update process, and fixed asset additions primarily for the Lower Mattagami and Niagara Tunnel projects, partially offset by depreciation for 2011.
Nuclear fixed asset removal and nuclear waste management funds	**11,898**	11,246	The increase was primarily due to earnings on, and contributions to, the Used Fuel Fund.
Regulatory assets	**1,457**	1,559	The decrease was primarily due to the amortization of regulatory asset balances of $282 million primarily as a result of the OEB's approval of the disposition of OPG's variance and deferral account balances as at December 31, 2010 in its March 2011 decision. These impacts were partially offset by the additions of $59 million to the Bruce Lease Net Revenues Variance Account, primarily related to earnings on the Nuclear Funds being lower than those reflected in the current regulated prices established by the OEB and the increase in the liability for the derivative embedded in the terms of the Bruce Lease, and the recognition of a regulatory asset of $96 million related to the Pension and OPEB Cost Variance Account pursuant to the OEB's June 2011 decision.
Fixed asset removal and nuclear waste management liabilities	**14,219**	12,704	The increase was primarily due to the change in the estimate for the liability for nuclear fixed asset removal and nuclear waste management resulting from the ONFA Reference Plan update process. In addition, the liability increased in 2011 as a result of accretion expense due to the passage of time, partially offset by expenditures on nuclear fixed asset removal and waste management activities.

Off-Balance Sheet Arrangements

In the normal course of operations, OPG engages in a variety of transactions that, under Canadian GAAP, are either not recorded in the Company's consolidated financial statements or are recorded in the Company's consolidated financial statements using amounts that differ from the full contract amounts. Principal off-balance sheet activities that OPG undertakes include securitization of certain accounts receivable, guarantees, which provide financial or performance assurance to third parties on behalf of certain subsidiaries, and long-term fixed price contracts.

Securitization

In October 2003, OPG completed a revolving securitization agreement with an independent trust. The independent trust is not controlled by OPG, nor is OPG the primary beneficiary. As such, the results of the trust are not consolidated. The securitization provides OPG with an opportunity to obtain an alternative source of cost-effective funding. For 2011 and 2010, the average all-in cost of funds was 1.9 percent, and 1.5 percent, respectively. The pre-tax charges on sales to the trust were $4 million for 2011 and 2010, respectively. The current securitization agreement extends to August 31, 2013, with a commitment of $250 million and a securitized receivable balance of $50 million, as at December 31, 2011. Refer to Note 5 of OPG's 2011 annual audited consolidated financial statements for additional information.

Guarantees

As part of normal business, OPG and certain of its subsidiaries and joint ventures enter into various agreements providing financial or performance assurance to third parties on behalf of certain subsidiaries and joint ventures. Such agreements include guarantees, standby Letters of Credit and surety bonds.

CRITICAL ACCOUNTING POLICIES AND ESTIMATES

OPG's significant accounting policies, including the impact of future accounting pronouncements, are outlined in Note 3 of OPG's 2011 annual audited consolidated financial statements. Certain of these policies are recognized as critical accounting policies by virtue of the subjective and complex judgments and estimates required around matters that are inherently uncertain and could result in materially different amounts being reported under different conditions or assumptions. The critical accounting policies and estimates that affect OPG's consolidated financial statements, the likelihood that materially different amounts would be reported under varied conditions and estimates, and the impact of changes in certain conditions or assumptions are highlighted below.

Rate Regulated Accounting

The Ontario Energy Board Act, 1998 and *Ontario Regulation 53/05* provide that OPG receives regulated prices for electricity generated from the Prescribed Facilities. Beginning April 1, 2008, OPG's regulated prices for these facilities are determined by the OEB.

The OEB is a self-funding Crown corporation. Its mandate and authority come from the *Ontario Energy Board Act, 1998*, the *Electricity Act, 1998*, and a number of other provincial statutes. The OEB is an independent, quasi-judicial tribunal that reports to the Legislature of the Province through the Minister of Energy. It regulates market participants in the Province's natural gas and electricity industries and carries out its regulatory functions through public hearings and other more informal processes such as consultations.

Canadian GAAP recognizes that rate regulation can create economic benefits and obligations that are required by the regulator to be obtained from, or settled, with the ratepayers. When the Company assesses that there is sufficient assurance that incurred costs will be recovered in the future, those costs are deferred and reported as a regulatory asset. When the OEB provides recovery through current rates for costs that have not been incurred, and that are required to be refunded to the ratepayers, the Company records a regulatory liability.

Certain of the regulatory assets and liabilities recognized by the Company relate to variance and deferral accounts authorized by the OEB, including those authorized pursuant to *Ontario Regulation 53/05*. Variance accounts capture differences between actual costs and revenues, and the corresponding forecast amounts approved in the setting of regulated prices. The measurement of regulatory assets and liabilities is subject to certain estimates and assumptions, including assumptions made in the interpretation of *Ontario Regulation 53/05* and the OEB's decisions. These estimates and assumptions made in the interpretation of *Ontario Regulation 53/05* and the OEB's decisions are reviewed as part of the OEB's regulatory process.

Regulatory asset and liability balances for variance and deferral accounts approved by the OEB for inclusion in regulated prices are amortized based on approved recovery periods. Disallowed balances, including associated interest, are charged to operations in the period that the OEB's decision is issued. Interest is applied to regulatory balances as prescribed by the OEB in order to recognize the cost of financing amounts to be recovered from, or repaid to, ratepayers.

Certain assets and liabilities arising from rate regulation have specific guidance under a primary source of Canadian GAAP that applies only to the particular circumstances

described therein, including those arising under Section 1600, *Consolidated Financial Statements*, Section 3061, *Property, Plant and Equipment*, Section 3465, *Income Taxes*, and Section 3475, *Disposal of Long-Lived Assets and Discontinued Operations* of the CICA Handbook. Other assets and liabilities arising from rate regulation do not have specific guidance under a primary source of Canadian GAAP. Therefore, Section 1100, *Generally Accepted Accounting Principles* ("Section 1100") of the CICA Handbook directs the Company to adopt accounting policies that are developed through the exercise of professional judgment and the application of concepts described in Section 1000, *Financial Statement Concepts* of the CICA Handbook. In developing these accounting policies, the Company may consult other sources including pronouncements issued by bodies authorized to issue accounting standards in other jurisdictions. Therefore, in accordance with Section 1100, the Company has determined that its other assets and liabilities arising from rate regulation qualify for recognition under Canadian GAAP as this recognition is consistent with the United States Financial Accounting Standards Board Accounting Standards Codification Topic 980, *Regulated Operations*.

Additional information on OPG's regulatory assets and liabilities is provided in Notes 7, 10, 11 and 12 of OPG's 2011 audited annual consolidated financial statements.

Income Taxes

OPG is exempt from tax under the *Income Tax Act* (Canada). However, under the Electricity Act, 1998, OPG is required to make payments in lieu of corporate income and, up to June 30, 2010, capital taxes to the OEFC. These payments are calculated in accordance with the *Income Tax Act* (Canada) and the *Taxation Act, 2007* (Ontario), as modified by regulations made under the *Electricity Act, 1998*.

OPG's operations are complex and the computation of the provision for income taxes involves interpretation of the various tax statutes and regulations. The *Income Tax Act* (Canada) and the *Taxation Act, 2007* (Ontario) have a large body of technical interpretations and case law to help determine the Company's filing position. However, the *Electricity Act, 1998* and tax related regulations are relatively new and therefore it has been necessary for OPG, since its inception, to take certain filing positions in calculating the amount of its income tax provision. These filing positions may be challenged on audit and some of them possibly disallowed, resulting in a potential significant change in OPG's tax provision upon reassessment.

OPG follows the liability method of tax accounting for all its business segments and records a corresponding regulatory asset or liability for the future income taxes that are expected to be recovered or refunded through future regulated prices charged to customers.

Future income tax assets of $4,353 million (2010 – $3,976 million) have been recorded on the consolidated balance sheet at December 31, 2011. The Company believes there will be sufficient future taxable income and capital gains that will permit the use of these deductions and carry-forwards.

Future tax liabilities of $5,083 million (2010 – $4,701 million) have been recorded on the consolidated balance sheet as at December 31, 2011.

Fixed Assets

Property, plant and equipment is tested for recoverability whenever events or changes in circumstances indicate that the carrying amounts may not be recoverable. Recoverability of property, plant and equipment is determined by comparing the carrying amount of an asset to the undiscounted future net cash flows expected to be generated from the asset over its estimated useful life. In cases where the undiscounted expected future cash flows are less than the carrying amount, an impairment loss is recognized equal to the amount by which the carrying amount exceeds the fair value, or discounted cash flows.

Various assumptions and accounting estimates are required to determine whether an impairment loss should be recognized and, if so, the value of such loss. This includes factors such as short-term and long-term forecasts of the future market price of electricity, the demand for and supply of electricity, the in-service dates of new generating stations, inflation, fuel prices, capital expenditures and station lives. The amount of the future net cash flow that OPG expects to receive from its fixed assets could differ materially from the net book values recorded in OPG's consolidated financial statements.

The accounting estimates related to asset depreciation require significant management judgment to assess the appropriate useful lives of OPG's long-lived assets, including consideration of various technological and other factors.

Nuclear Fixed Asset Removal and Nuclear Waste Management Funds

Decommissioning Fund

The Decommissioning Fund was established to fund the future costs of nuclear fixed asset removal, long-term L&ILW management, and a portion of used fuel storage costs after station life. Upon termination of the ONFA, the Province has a right to any excess funds in the Decommissioning Fund, which is the excess of the fair market value of the Decommissioning Fund assets over the estimated completion costs as per the most recently approved ONFA Reference Plan. When the Decommissioning Fund is overfunded, OPG limits the earnings it recognizes in its consolidated financial statements, through a charge to

the Decommissioning Fund with a corresponding payable to the Province, such that the balance of the Decommissioning Fund would equal the cost estimate of the liability based on the most recently approved ONFA Reference Plan. The payable to the Province could be reduced in subsequent periods in the event that the Decommissioning Fund earns less than its target rate of return or in the event that a new ONFA Reference Plan is approved with a higher estimated decommissioning liability. When the Decommissioning Fund is underfunded, the earnings on the Decommissioning Fund reflect actual fund returns based on the market value of the assets.

Used Fuel Fund

Under the ONFA, the Province guarantees OPG's annual return in the Used Fuel Fund at 3.25 percent plus the change in the Ontario Consumer Price Index ("CPI") for funding related to the first 2.23 million used fuel bundles ("committed return"). OPG recognizes the committed return on the Used Fuel Fund and includes it in the earnings on the nuclear fixed asset removal and nuclear waste management funds. The difference between the committed return on the Used Fuel Fund and the actual market return, based on the fair value of the Used Fuel Fund's assets, which includes realized and unrealized returns, is recorded as due to or due from the Province. The due to or due from the Province represents the amount OPG would pay to or receive from the Province if the committed return were to be settled as of the balance sheet date. As part of its regular contributions to the Used Fuel Fund, OPG was required to allocate $133 million of its 2011 contribution towards its liability associated with future fuel bundles that exceed the 2.23 million threshold (2010 – $147 million). As prescribed under the ONFA, OPG's contributions for incremental fuel bundles are not subject the Province's guaranteed rate of return, but rather earn a return based on changes in the market value of the assets of the Used Fuel Fund.

As required by the terms of the ONFA, the Province has provided a Provincial Guarantee to the CNSC since 2003, on behalf of OPG. The *Nuclear Safety and Control Act* (Canada) requires OPG to have sufficient funds available to discharge the current nuclear decommissioning and waste management liabilities. The Provincial Guarantee provides for any shortfall between the long-term liabilities and the current market value of the Used Fuel Fund and the Decommissioning Fund, up to the value of the Provincial Guarantee. OPG pays the Province an annual guarantee fee of 0.5 percent of the amount of the Provincial Guarantee provided by the Province. In December 2009, the CNSC approved an increase in the amount of the Provincial Guarantee to $1,545 million effective on March 1, 2010. The value of this Provincial Guarantee will be in effect through to the end of 2012, when the next reference plan for the CNSC is planned to be approved. In 2011, OPG paid a guarantee fee of $8 million based on a Provincial Guarantee amount of $1,545 million, for the period January 1, 2011 to December 31, 2011. OPG is having preliminary discussions with the CNSC on the process for submitting the required documentation for the 2013 – 2017 Reference Plan.

Pension and Other Post Employment Benefits

The determination of OPG's pension and OPEB costs and obligations is dependent on accounting policies and assumptions used in calculating such amounts.

Accounting Policy

In accordance with Canadian GAAP, actual results that differ from the assumptions used, as well as gains and losses resulting from changes in assumptions, are accumulated and amortized over future periods and therefore generally affect the recognized costs and the recorded obligation in future periods.

Certain actuarial gains and losses have not been included in OPG's pension and OPEB costs and are therefore not yet reflected in OPG's pension and OPEB accrued benefit asset or liability as a result of the following:

- Pension fund assets are valued using market-related values for purposes of determining the amortization of actuarial gains or losses and the expected return on plan assets. The market-related value recognizes gains and losses on equity assets relative to a six percent assumed real return over a five-year period.
- For pension and OPEB, the excess of the net cumulative unamortized gain or loss, over 10 percent of the greater of the benefit obligation and the market-related value of the plan assets (the "corridor"), is amortized over the expected average remaining service life.

In addition, past service costs arising from pension and OPEB plan amendments are amortized over future periods and therefore affect recognized costs and the recorded obligation in future periods.

As at December 31, 2011, the unamortized net actuarial loss and unamortized past service costs for the pension and OPEB plans totalled $4,574 million (2010 - $2,958 million). Details of the unamortized net actuarial loss and total unamortized past service costs at December 31, 2011 and 2010 are as follows:

	Registered Pension Plans		Supplementary Pension Plans		Other Post Employment Benefits	
(millions of dollars)	**2011**	2010	**2011**	2010	**2011**	2010
Net actuarial loss not yet subject to amortization due to use of market-related values	**714**	566	**-**	-	**-**	-
Net actuarial loss not subject to amortization due to use of corridor	**1,220**	1,038	**26**	22	**271**	234
Net actuarial loss subject to amortization	**1,847**	789	**51**	29	**430**	253
Unamortized net actuarial loss	**3,781**	2,393	**77**	51	**701**	487
Unamortized past service costs	**-**	10	**-**	-	**15**	17

Accounting Assumptions

Assumptions are significant inputs to actuarial models that measure pension and OPEB obligations and related effects on operations. Two critical assumptions, discount rate and inflation, are important elements in the determination of benefit costs and obligations. In addition, the expected return on assets is a critical assumption in the determination of registered pension plan costs. These assumptions, as well as other assumptions involving demographic factors such as retirement age, mortality and employee turnover, are evaluated periodically by management in consultation with an independent actuary. During the evaluation process, the assumptions are updated to reflect past experience and expectations for the future. Actual results in any given year will often differ from actuarial assumptions because of economic and other factors, and in accordance with Canadian GAAP, the impact of these differences is accumulated and amortized over future periods.

The discount rates used by OPG in determining projected benefit obligations and the costs for the Company's employee benefit plans are based on representative AA corporate bond yields. The respective discount rates enable OPG to calculate the present value of the expected future cash flows on the measurement date. A lower discount rate increases the present value of benefit obligations and increases benefit plan costs. The expected rate of return on plan assets is based on current and expected asset allocation, as well as the long-term historical risks and returns associated with each asset class within the plan portfolio. A lower expected rate of return on plan assets increases pension cost.

The discount rate used to determine the projected pension benefit obligations as at December 31, 2011 of 5.10 percent represents a significant decrease compared to the 5.80 percent discount rate that was used to determine the obligation as at December 31, 2010. The deficit for the registered pension plans increased from $1,257 million as at December 31, 2010 to $2,593 million as at December 31, 2011 primarily as a result of the decrease in the discount rate.

The discount rate used to determine the projected benefit obligation for OPEB as at December 31, 2011 of 5.07 percent decreased significantly compared to the 5.67 percent discount rate that was used to determine the obligation as at December 31, 2010. The projected benefit obligation increased from $2,341 million at December 31, 2010 to $2,708 million as at December 31, 2011 primarily as a result of the decrease in the discount rate.

A change in assumptions, holding all other assumptions constant, would increase (decrease) 2011 costs, excluding amortization components, as follows:

(millions of dollars)	Registered Pension Plans[1]	Supplementary Pension Plans[1]	Other Post Employment Benefits[1]
Expected long-term rate of return			
0.25% increase	(24)	na	na
0.25% decrease	24	na	na
Discount rate			
0.25% increase	(13)	-	(4)
0.25% decrease	14	-	4
Inflation			
0.25% increase	41	1	-
0.25% decrease	(38)	(1)	-
Salary increases			
0.25% increase	11	2	-
0.25% decrease	(11)	(2)	-
Health care cost trend rate			
1% increase	na	na	41
1% decrease	na	na	(31)

na – change in assumption not applicable

1 Excluding the impact of the Pension and OPEB Cost Variance Account.

Asset Retirement Obligation

As at December 31, 2011, OPG's asset retirement obligation was $14,219 million (2010 – $12,704 million). OPG's asset retirement obligation consists of fixed asset removal and nuclear waste management liabilities and is comprised of expected costs to be incurred up to and beyond termination of operations and the closure of nuclear, thermal generating plant facilities and other facilities. The liabilities associated with decommissioning the nuclear generating stations and long-term used nuclear fuel management comprise the most significant amounts of the total obligation. Costs will be incurred for activities such as dismantling, demolition and disposal of facilities and equipment, remediation and restoration of sites and the ongoing and long-term management of nuclear used fuel and L&ILW material.

Nuclear station decommissioning consists of original placement of stations into a safe store condition followed by a nominal 30-year safe store period prior to station dismantling. Under the terms of the lease agreement with Bruce Power, OPG continues to be responsible for the nuclear fixed asset removal and nuclear waste management liabilities associated with the Bruce nuclear generating stations.

The following costs are recognized as a liability:

- The present value of the costs of dismantling the nuclear and thermal production facilities and other facilities after the end of their useful lives;
- The present value of the fixed cost portion of nuclear waste management programs that are required based on the total volume of waste expected to be generated over the assumed life of the stations; and
- The present value of the variable cost portion of nuclear waste management programs taking into account actual waste volumes generated to date.

The significant assumptions underlying operational and technical factors used in the calculation of the accrued liabilities are subject to periodic review. Changes to these assumptions, including changes to assumptions on the timing of the programs, end of life dates, financial indicators or the technology employed may result in significant changes to the value of the accrued liabilities. With programs of this duration and the evolving technology to handle the nuclear waste, there is a significant degree of uncertainty surrounding the measurement accuracy of the costs for these programs, which may increase or decrease over time. The estimates of the Nuclear Liabilities are reviewed on an annual basis as part of the ongoing, overall nuclear waste management program. Changes

in the Nuclear Liabilities resulting from changes in assumptions or estimates that impact the amount of the originally estimated undiscounted cash flows are recorded as an adjustment to the liabilities, with a corresponding change in the related asset retirement costs capitalized as part of the carrying amount of nuclear fixed assets.

For the purposes of calculating OPG's fixed asset removal and nuclear waste management liabilities, as at December 31, 2011, consistent with the current accounting end of life assumptions, nuclear and thermal plant closures are projected to occur over the next three to 42 years.

The liability for non-nuclear fixed asset removal was $159 million as at December 31, 2011 (2010 – $157 million). This liability primarily represents the estimated costs of decommissioning OPG's thermal generating stations at the end of their service lives and is based on third-party cost estimates after an in depth review of active plant sites and an assessment of required clean-up and restoration activities. In 2011, OPG completed a review of the liability for most of its thermal generating stations. As at December 31, 2011, the estimated retirement dates of the thermal stations for the purposes of this liability are between 2014 and 2030. The undiscounted amount of estimated future cash flows associated with the non-nuclear liabilities is $215 million.

OPG has no legal obligation associated with the decommissioning of its hydroelectric generating facilities and the costs cannot be reasonably estimated because of the long service life of these assets. With either maintenance efforts or rebuilding, the water control structures are assumed to be used for the foreseeable future. Accordingly, OPG has not recognized a liability for the decommissioning of its hydroelectric generating facilities.

The liability for the nuclear fixed asset removal and nuclear waste management on a present value basis as at December 31, 2011 was $14,060 million (2010 – $12,547 million). The undiscounted cash flows related to expenditures for OPG's nuclear fixed asset removal and nuclear waste management liabilities in 2011 dollars as at December 31, 2011 over the next five years and thereafter are as follows:

(millions of dollars)	2012	2013	2014	2015	2016	Thereafter	Total
Expenditures for nuclear fixed asset removal and nuclear waste management[1]	263	260	535	476	554	29,353	31,441

1 Most of the above expenditures are expected to be reimbursed by OPG's Nuclear Funds as established by the ONFA. The contributions required under the ONFA are not included in these undiscounted cash flows but are reflected in the table under the heading, *Contractual and Commercial Commitments*.

OPG sets aside and invests funds held in segregated custodian and trustee accounts specifically for discharging its nuclear fixed asset removal and nuclear waste management liabilities. In accordance with the ONFA between OPG and the Province, OPG established a Used Fuel Fund and a Decommissioning Fund. OPG jointly oversees the investment management of the Nuclear Funds with the Province. The assets of the Nuclear Funds are maintained in third-party custodian accounts that are segregated from the rest of OPG's assets.

Environmental Liabilities

Current operations are subject to regulation with respect to emissions to air, water, and land as well as other environmental matters by federal, provincial, and local authorities. Environmental liabilities are recorded when it is considered likely that a liability has been incurred and the amount of the liability can be reasonably estimated at the date of the financial statements. The cost of obligations associated with current operations is provided for on an ongoing basis. Management believes it has made adequate provision in its consolidated financial statements to meet certain other environmental obligations. During 2011, a reduction of $19 million to the environmental liabilities was recognized related to the Regulated – Hydroelectric segment. As at December 31, 2011, OPG's environmental liabilities were $19 million (2010 – $39 million), the primary component of which is the land remediation program.

Financial Instruments Measured at Fair Value

Financial assets and liabilities, including exchange traded derivatives, and other financial instruments measured at fair value and for which quoted prices in an active market are available, are determined directly from those quoted market prices.

For financial instruments which do not have quoted market prices directly available, fair values are estimated using forward price curves developed from observable market prices or rates which may include the use of valuation techniques or models, based wherever possible on assumptions supported by observable market prices or rates prevailing at the consolidated balance sheet dates. This is the case for over-the-counter derivatives, which includes energy commodity derivatives, foreign exchange derivatives, and interest rate swap derivatives. Valuation models use general assumptions and market data and

therefore do not reflect the specific risks and other factors that would affect a particular instrument's fair value. The methodologies used for calculating the fair value adjustments are reviewed on an ongoing basis to ensure that they remain appropriate. If the valuation technique or model is not based on observable market data, specific valuation techniques are used primarily based on recent comparable transactions, comparable benchmark information, bid/ask spread of similar transactions, and other relevant factors.

OPG's use of financial instruments exposes the Company to various risks, including credit risk, commodity price risk, and foreign currency and interest rate risk. A discussion of how OPG manages these and other risks is found in the *Risk Management* section.

Changes in Accounting Policies and Estimates

Business Combinations, Consolidated Financial Statements, and Non-controlling Interests

Effective January 1, 2011, OPG adopted the CICA Handbook Section 1582, *Business Combinations* ("Section 1582"), Section 1601, *Consolidated Financial Statements* ("Section 1601"), and Section 1602, *Non-controlling Interests* ("Section 1602"). Section 1582 specifies a number of changes, including an expanded definition of a business, a requirement to measure all business acquisitions at fair value, and a requirement to recognize acquisition-related costs as expenses. Section 1601 establishes the standards for preparing consolidated financial statements. Section 1602 specifies that non-controlling interests be treated as a separate component of equity, not as a liability or other item outside of equity. These standards shall be applied prospectively to business combinations whose acquisition date is on or after the date of adoption. As a result of adopting Section 1602, the Company has reclassified its non-controlling interests as a separate component of equity. The adoption of Section 1582 and Section 1601 did not have a material impact on the Company's consolidated financial statements as at and for the year ended December 31, 2011.

Depreciation of Long-Lived Assets

The accounting estimates related to the depreciation of long-lived assets require significant management judgment to assess the appropriate useful lives of OPG's long-lived assets, including consideration of various technological and other factors.

As a result of its decision to close two coal-fired units at each of the Lambton and Nanticoke coal-fired generating stations, effective September 2009, OPG revised the end of life dates for these units to October 2010 from December 2014. This change in estimate was accounted for on a prospective basis and increased depreciation expense by $29 million in 2010. In 2011, consistent with the Energy Plan and Supply Mix Directive, OPG has revised the end of life dates for two additional units at the Nanticoke generating station, for the purposes of calculating depreciation, to December 2011 from December 2014. This change in estimate was accounted for on a prospective basis and increased depreciation expense by $18 million in 2011. On December 31, 2011, these two units at the Nanticoke generating station were removed from service.

The service life of the Bruce A nuclear generating station, for the purposes of calculating depreciation, was extended from 2037 to 2042 to reflect the expected operating period for the refurbished units at the generating station. The life extension is expected to decrease depreciation expense by $5 million annually commencing January 2012, excluding the impact of the adjustment to the Nuclear Liabilities recorded in December 2011, which is discussed in the *Liabilities for Fixed Asset Removal and Nuclear Waste Management* section.

Liabilities for Fixed Asset Removal and Nuclear Waste Management

In February 2010, OPG announced its decision to commence the definition phase of the refurbishment of the Darlington nuclear generating station. Accordingly, the service life of the Darlington nuclear generating station, for the purposes of calculating depreciation, was extended from 2019 to 2051. The extension of service life also impacted the assumptions for OPG's Nuclear Liabilities primarily due to increases in the fixed costs related to additional used fuel bundles, partially offset by a decrease in the liability for decommissioning, resulting from the change in the service life assumptions. The net increase in the liabilities was $293 million using a discount rate of 4.8 percent. The increase in liabilities was reflected with a corresponding increase in the fixed asset balance in the first quarter of 2010. As a result of these changes, OPG's depreciation expense decreased by $135 million in 2010.

The most recent update of the estimate for the Nuclear Liabilities was performed as at December 31, 2011 and resulted in a $934 million increase to OPG's liabilities, and a corresponding increase in the carrying value of the nuclear generating stations to which the liabilities relate. The change in the liabilities reflects the results of a comprehensive process undertaken to update the baseline cost estimates for each of OPG's nuclear waste management and decommissioning programs. OPG follows a standard process that requires such an update on a five-year cyclical basis unless business circumstances and assumptions require an earlier update process. This update to the Nuclear Liabilities results from the ONFA Reference Plan update process.

The ONFA Reference Plan update process includes cash flows for decommissioning nuclear stations for approximately 40 years after station shutdown and to 2071 for placement of used fuel into the long-term disposal repository followed by extended monitoring. The change in estimate is expected to increase depreciation and accretion expenses in 2012 by $148 million and $32 million, respectively.

The net incremental undiscounted estimated cash flows for the Nuclear Liabilities resulting from the update process were discounted using the current credit-adjusted risk-free rate of 3.4 percent. A ten basis points (0.1 percent) increase or decrease in this discount rate will increase or decrease the carrying value of the liabilities by approximately $8 million or $9 million, respectively.

Restructuring

As a result of the decision to close two coal-fired units at each of the Lambton and Nanticoke generating stations in 2010 and two additional units at the Nanticoke generating station in 2011, OPG has worked closely with key stakeholders, including The Society and the PWU, in accordance with their respective collective bargaining agreements. Restructuring expenses of $21 million and $27 million were incurred during 2011 and 2010, respectively.

Liability for Non-Nuclear Fixed Asset Removal

As a result of the review completed in 2011, the liability estimate for non-nuclear fixed asset removal was reduced by $5 million. The reduction reflected an increase in the expected cost recovery for station equipment and materials, largely offset by an increase in the demolition estimate. As a result of the liability adjustment, OPG recorded a corresponding reduction to the fixed asset balance of $2 million and a net gain of $3 million as at December 31, 2011. The gain has been recorded as other (gains) losses in the Thermal segment and Other category consistent with the segment classification of the stations.

CONVERSION TO US GAAP

Introduction to Conversion Project

OPG previously intended to adopt International Financial Reporting Standards ("IFRS") as of January 1, 2012. In December 2011, OPG decided to report under US GAAP beginning January 1, 2012. In January 2012, OPG filed with and received approval from the Ontario Securities Commission for exemptive relief from the requirements of section 3.2 of National Instrument 52-107 *Acceptable Accounting Policies* and Auditing Standards, which would otherwise require OPG to file its consolidated financial statements based on IFRS. The exemption allows OPG to file consolidated financial statements based on US GAAP as of January 1, 2012 without becoming a Securities and Exchange Commission registrant, or issuing public debt. The exemption applies to the financial years that begin on or after January 1, 2012, but before January 1, 2015.

In addition, OPG filed an application with the OEB in December 2011 for an accounting order establishing a deferral account to record the financial impacts associated with the change from Canadian GAAP to US GAAP effective January 1, 2012. A public hearing process on this application has commenced and is ongoing as of the date of this MD&A. The OEB's decision on this accounting order application will not constitute a decision with respect to OPG's use of US GAAP for regulatory purposes. OPG is required to seek the OEB's approval to use US GAAP for regulatory purposes in its next application for new regulated prices, which OPG plans to file on the basis of US GAAP in the second quarter of 2012. The OEB's authorization to establish the deferral account sought in OPG's December 2011 application would preserve OPG's ability to record financial impacts associated with the change from Canadian GAAP to US GAAP if the OEB approves the use of US GAAP for regulatory purposes. The recovery or repayment of the amounts recorded in the account would be subject to the OEB's approval.

OPG commenced its US GAAP conversion project during the fourth quarter of 2011 and has established a project governance structure. This structure incorporates direction from senior levels of management, and input from the finance function, representatives from all business units, and the information technology function. There is regular reporting to executive management and to the Audit and Finance Committee of the Board of Directors. OPG has also engaged an external expert advisor. OPG is in the process of determining the quantitative impact of transitioning to US GAAP. OPG will publish its first consolidated financial statements prepared in accordance with US GAAP for the three months ending and as at March 31, 2012, and for the corresponding comparative period. The transitional balance sheet as at January 1, 2011 will be disclosed in the March 31, 2012 interim consolidated financial statements.

Phases of Conversion

OPG's conversion project consists of three phases: diagnostic, development, and implementation.

Diagnostic Phase

This phase involved a high-level review of major differences between Canadian GAAP and US GAAP, and a review of OPG's significant accounting and reporting policies. OPG completed the diagnostic phase of the conversion project during the fourth quarter of 2011 and determined that the

most significantly impacted areas include Employee Benefits and Joint Ventures, and the related impacts on regulatory assets and liabilities and income taxes.

Development and Implementation Phase

The development phase, which began in the fourth quarter of 2011, involves a detailed analysis of key impact areas, issue resolutions, and the preparation of illustrative financial statements.

Development phase activities include:

- The evaluation of accounting policy alternatives;
- The investigation and development of solutions to resolve differences identified in the diagnostic phase;
- Changes to existing accounting policies and practices, business processes, information technology systems, and internal controls; and
- The implementation of a change management strategy to address the information and training needs of internal and external stakeholders.

Appropriate resources have been secured to complete the changeover on a timely basis according to the plan milestones. OPG has ensured training needs are met and continue to be addressed throughout the changeover period.

In the third and final phase of OPG's US GAAP conversion plan, OPG will integrate the changes to affected accounting policies and practices, business processes, information technology systems and internal controls.

OPG will continue to assess the impact of conversion to US GAAP on its interim March 31, 2012 consolidated financial statements.

Assessment of Progress of Selected Key Activities

The following discussion provides certain elements of the changeover plan and an assessment of the progress OPG has achieved as of the date of the MD&A. This information reflects OPG's most recent assumptions and expectations. Circumstances may arise, such as changes in regulatory requirements or economic conditions, which could change these assumptions or expectations.

Financial Statement Preparation

At this time, OPG is identifying the relevant differences between US GAAP and current accounting policies and disclosures. This process will be completed upon the issuance of OPG's March 31, 2012 interim consolidated financial statements. OPG is preparing illustrative financial statements, including note disclosures, to comply with US GAAP.

Training and Communication

Given the similarities between Canadian GAAP and US GAAP as it pertains to OPG, OPG provides training to employees directly involved in the conversion to US GAAP on specific conversion issues. Further training on any changes in policy will be provided to affected employees and operating units. OPG has engaged subject matter experts throughout the process and will continue to do so until the conversion project is completed. OPG will provide training to the Audit and Finance Committee and the Board of Directors.

IT Systems

OPG has identified the differences that would require changes to financial systems. These changes are in progress and will be completed in the first quarter of 2012.

Contractual Arrangements and Compensation

OPG is identifying and discussing with internal and external parties the impact of the changeover on contractual arrangements, including financial covenants and employee compensation plans.

Internal Controls over Financial Reporting, Disclosure Controls and Procedures, and Related Communications

At this time there are no significant changes to existing processes or procedures related to internal controls over financial reporting, or disclosure controls. OPG does not anticipate any changes to existing controls or a need for additional controls as a result of conversion from Canadian GAAP to US GAAP. US GAAP opening balance sheet adjustment controls will be evaluated on the basis of the January 1, 2011 opening transitional balance sheet.

RISK MANAGEMENT

Overview

OPG faces various risks that could significantly impact the achievement of its strategic, operational, financial, environmental, and health and safety goals. The aim of risk management is to identify and mitigate these risks and preserve the value of Shareholder's investment in OPG's assets.

Risk Governance Structure

The Risk Oversight Committee ("ROC") of the Board of Directors assists the Board to fulfill its oversight responsibilities for matters relating to identification and management of the Company's key business risks. An Executive Risk Committee, which is comprised of the business unit leaders, the Chief Financial Officer ("CFO") and the Chief Risk Officer ("CRO"), assists the ROC in fulfilling its governance and oversight responsibilities related to OPG's risk management activities.

Risk Management Activities

OPG faces a wide array of risks as a result of its business operations. The enterprise risk management framework is designed to identify and evaluate risks or threats on the basis of their potential impact on the Company's capacity to achieve specific business plan objectives.

Risk management reporting activities are coordinated by a centralized Corporate Risk Management group led by the CRO. Business units identify risks that could prevent achievement of their business plan objectives. OPG's senior executives identify broader strategic risks, then prioritize the tactical and strategic risks to determine the top risks to the Company. Senior management sets risk limits for the financing, procurement and trading activities of the Company and ensures that effective risk management policies and processes are in place to ensure compliance with such limits in order to maintain an appropriate balance between risk and return. OPG's risk management process aims to continually evaluate the effectiveness of risk mitigation activities for identified key risks. The findings from this evaluation process are reported quarterly to the ROC.

For the purpose of disclosure, a number of key risks are presented in five main categories namely, operational, financial, regulatory, enterprise-wide, and environmental. For each category, risks are briefly described.

Operational Risks

Risks Associated with Existing Generating Operations

OPG is exposed to uncertain output from its existing generating stations that could adversely impact its operating performance.

Operational risks are those risks normally inherent in the operation of electricity generating facilities. These risks can lead to interruptions in the operations of generating stations or uncertainty in future production. Risks to OPG's diverse fleet of nuclear, hydroelectric and thermal generating stations are a function of the age of the stations and the technology used.

Nuclear Generating Stations

Operating an aging nuclear fleet exposes OPG to unique risks such as unplanned outages, an increase in cost of operations and risks associated with nuclear waste management operations.

The uncertainty associated with the electricity volume generated by OPG's CANDU nuclear generating units is primarily driven by the condition of the station components and systems, which are all subject to the effects of aging.

Fuel channels are expected to be the most life-limiting component affecting station end of life. Other significant factors identified to-date include degradation of primary heat transport pump motors, fuel handling performance issues, feeder pipe wall thinning and pressure tube-calandria tube contact. To respond to these challenges, OPG has continued to implement extensive inspection and maintenance programs to monitor performance and identify corrective actions required to operate reliably, and within design parameters.

Deterioration of station components may progress in an unexpected manner, resulting in the need to increase monitoring, conduct extensive repairs, or undertake additional remedial measures. To maintain a safe operating margin, a nuclear unit could be derated. When an unexpected condition first appears, a specific monitoring program is established. The primary impact of these conditions on OPG is an increase in the long-term cost of operations. The associated mitigation may create additional outage work, thus increasing the number of outages or extending planned outages.

The process of generating electricity by nuclear generating stations also produces nuclear waste. OPG is accountable for the management of used fuel, L&ILW and decommissioning of all its nuclear facilities, as required by the CNSC, including the stations on lease to Bruce Power. Currently there is no licensed facility in Canada for the permanent disposal of nuclear used fuel. The NWMO has developed a process for moving forward with Adaptive Phase Management, as the long-term solution for Canada's nuclear fuel waste. In the interim, OPG is storing and managing used fuel at its nuclear generating station sites.

To address the need for storage of L&ILW, OPG is developing a DGR for the long-term management of L&ILW from OPG-owned nuclear generating stations. On January 24, 2012, the CNSC and the Canadian Environmental Assessment Agency announced the appointment of a three member Joint Review Panel for OPG's DGR. The Joint Review Panel will conduct an examination of the environmental effects of the proposed DGR to meet the requirements of the *Canadian Environmental Assessment Act*. On February 3, 2012, the Joint Review Panel announced the start of the six month public review period on the submitted documents.

Community opposition to deep geologic disposal of used fuel and L&ILW, and potential community opposition to prolonged on-site used fuel storage may impede the ability of OPG, its contractors, and subcontractors to develop disposal plans acceptable to major stakeholders. Other factors impacting the residual risk around nuclear waste management operations include human performance and regulatory requirements.

Pickering B Continued Operations

In February 2010, OPG announced its plans to continue the safe and reliable operation of OPG's Pickering B nuclear generating station until 2020 and then place these generating units in a safe storage stage for eventual decommissioning. Risk factors include discovery of unexpected conditions, equipment failures, requirement for significant plant modifications, and obtaining CNSC approval. Inability to achieve Pickering B Continued Operations could reduce OPG's revenue, and lead to discontinuation of Pickering A operations and the advancement of station decommissioning expenditures. To mitigate these risks, OPG continues to undertake a number of activities which include work on fuel channel life cycle management, a regulatory strategy and economic analysis to support optimal reactor end of life dates, and modification of the operating and maintenance strategy to support Continued Operations.

Hydroelectric Generating Stations

OPG's hydroelectric generation is exposed to risks associated with water flows, the age of plant and equipment, and dam safety.

The extent to which OPG can operate its hydroelectric generation facilities depends on the availability of water. Significant variances in weather or water flows, including climate change, could affect water flows. OPG manages this risk by using production forecasting models that incorporate unit efficiency characteristics, water flow conditions and outage plans. Inputs to the models are assessed, monitored and adjusted on an ongoing basis. For the regulated hydroelectric generation, the financial impacts of variability in electricity production due to the differences between the water conditions underpinning the hydroelectric regulated prices and actual water conditions are captured by the Hydroelectric Water Conditions Variance Account, authorized by the OEB. The unregulated hydroelectric generation remains exposed to the risk associated with uncertain water flows.

OPG's hydroelectric generating stations vary in age and the majority of the hydroelectric generating equipment is over 50 years old. The age of the equipment and civil components creates risks to reliability of some hydroelectric generating stations. OPG manages these reliability risks by performing inspection and maintenance of critical components, and conducting detailed engineering reviews and station condition assessments in order to identify future work required to sustain and, if necessary, upgrade a station.

The hydroelectric business segments operate 231 dams across the Province. Dam safety legislation does not currently exist in the Province. In August 2011, the Ontario Ministry of Natural Resources ("MNR") published a set of Technical Guidelines following a period of public consultation. These Technical Guidelines, which are not a regulation, represent the government standards for dam safety. In general, OPG practices in the area of Dam Safety and Public Safety Around Dams would exceed the minimum requirements outlined in the MNR Technical Guidelines.

The occurrence of dam failures at any of OPG's hydroelectric generating stations could result in significant liability for damages and a loss of generating capacity. Repairing such failures could require OPG to incur significant expenditures of capital and other resources. Since 2007, OPG has engaged an advisory panel consisting of internationally recognized experts to conduct an independent review of OPG's Dam Safety Program. This panel has consistently found that the risks associated with dams owned and operated by OPG are being managed in alignment with industry best practices and guidelines.

OPG is required to comply with the Standards and Guidelines for Conservation of Provincial Heritage Properties which came into effect in July 2010. OPG is required to implement a heritage conservation program and certain hydroelectric generating stations and assets could be identified as heritage properties. As such, the Company may be required to incur costs to meet the requirements of the *Ontario Heritage Act*.

Thermal Generating Stations

Converting OPG's coal-fired units to run on alternate fuels will require a cost recovery mechanism, and resolution of technical safety and fuel supply issues.

OPG has an agreement with the OEFC to secure financial recovery of ongoing maintenance and operating costs of the Nanticoke and Lambton coal-fired stations. These assets would otherwise be financially impaired resulting in a financial write down of their remaining book value. The agreement extends until 2014. If the agreement were to be cancelled, it could lead to a write-down of the book value of these stations and/or an earlier shutdown.

Production from Lennox Generating Station is subject to a LGSA with the OPA. Further information on this LGSA can be found under *Recent Developments*.

Thermal's capability to move to alternate fuels such as natural gas, biomass, and dual gas-biomass will depend on obtaining Shareholder approval of coal unit conversion and achieving cost recovery agreements with the OPA. OPG is also continuing work to evaluate the technical and supply chain aspects of converting units to natural gas and/or biomass.

Risks Associated with Major Development Projects

The risks associated with the cost, schedule and technical aspects of the major development projects could adversely impact OPG's financial performance and ultimately, its corporate reputation.

OPG is undertaking numerous capital intensive projects designed to enhance and expand its fleet of generating stations. These projects require significant investments in terms of resources. There may be an adverse effect on the Company if OPG is unable to: effectively manage these projects; achieve the cost, schedule and quality required, unable to borrow the necessary capital, or fully recover its capital and operating costs in a timely manner. Major projects include possible new nuclear units at OPG's Darlington site, potential refurbishment of existing nuclear generating stations, the Niagara Tunnel, the Lower Mattagami project, and other hydroelectric and thermal projects.

New Nuclear Units

The Government of Ontario, in its February 2011 Supply Mix Directive to the OPA, confirmed its commitment to new nuclear at Darlington and to continue to use nuclear generation for about 50 percent of Ontario's energy supply. In addition, in the Supply Mix Directive, the Government of Ontario indicated two new nuclear units at the Darlington site would be procured provided that it can be achieved in a cost-effective manner.

In August 2011, the Joint Review Panel overseeing the Darlington New Nuclear Project EA submitted its report to the federal Minister of the Environment. The Joint Review Panel concluded that the project is not likely to cause significant adverse environmental effects, given mitigation. The next step is for the federal government to make a final determination whether or not the EA should be accepted. The EA has been challenged by way of judicial review in the Federal Court of Canada on the grounds that the Joint Review Panel report failed to comply with requirements of the *Canadian Environmental Assessment Act,* and that the hearing deprived the applicants of certain procedural rights. OPG and the federal agencies have filed their affidavits. This judicial review could impact the timing of the EA approval.

Uncertainty with respect to the timing of a future choice of a nuclear reactor vendor continues. The choice of a nuclear reactor vendor would allow OPG to further identify risks associated with the project.

Darlington Refurbishment

The Darlington generating units, based on original design assumptions, are currently forecast to reach their nominal end of life between 2019 and 2021. In February 2010, OPG announced its decision to refurbish the Darlington generating station. The refurbishment of the Darlington nuclear generating station is expected to extend its operating life by approximately 30 years. Failure to achieve the objectives of the refurbishment project may result in future forced outages and more complex planned outages, potentially impacting the useful post-refurbishment life of the station. To mitigate this risk, and as part of the project front-end planning process, a component condition assessment has been performed on all significant systems within the station. This assessment has evaluated the current condition of the systems and identified required work to be performed in the refurbishment outages. Key life limiting components such as pressure tubes are included in the base refurbishment scope. A detailed ISR and EA were submitted to the CNSC in 2011. The ISR report concluded that the generating units meet regulatory requirements. The EA report concluded that refurbishment and continued operations will not result in any significant adverse environmental impacts.

Niagara Tunnel Project

While the TBM mining has been completed, some costs and schedule uncertainty remains with respect to the liner installation. The factors that contribute to the uncertainty include the activities to restore the tunnel profile, and the challenging logistics of concurrent construction operations. Allowances for these factors have been included in the cost estimate and schedule. The contractor has deployed additional resources to expedite the profile restoration work and has augmented concrete delivery methods to improve logistics, minimizing potential impact on the schedule for project completion.

Lower Mattagami River Project

Construction of the Lower Mattagami River project commenced in June 2010. The last of the six new generating units associated with the project are scheduled to be in-service by June 2015. Differing site conditions in the form of significant geotechnical issues were encountered at the Smoky Falls site. The impacts of geotechnical conditions encountered have been assessed and remedial actions have been implemented. In addition, key risks to the project costs and schedule include labour productivity on concrete pours during construction, and legal challenges or blockades by groups opposed to various aspects of the project. Risk mitigation activities include hiring an experienced contractor to construct the project, installing a shelter to continue concrete operations during the winter, detailed monitoring of labour productivity, and providing allowances in the cost estimate and schedule.

Other Development Projects

For projects that are in initial development stages, unforeseen delays in receiving permits or approvals, which may involve various external stakeholders, could result in schedule delays or ultimately, cancellation

of a project. OPG attempts to mitigate risks associated with delays in receiving permits and approvals through early involvement and constant communication with applicable government agencies, close consultation with external stakeholders, and ongoing monitoring of contractor performance relative to permits.

These projects could also be faced with increasing costs for equipment and construction that could impact their economic viability. OPG continuously monitors such trends in input costs in order to keep abreast of emerging issues. OPG seeks to manage and limit cost increases where possible, through contracting strategies.

Financial Risks

OPG is exposed to a number of discrete market-related risks that could adversely impact its financial and operating performance.

OPG is exposed to a number of financial risks, many of which arise due to OPG's exposure to volatility in commodity, equity and foreign exchange markets, and interest rate movements. Pension and OPEB costs are also potentially impacted by these various market and interest rate movements. OPG manages this complex array of risks to reduce the uncertainty or mitigate the potential unfavourable impact on the Company's financial results. Residual risk to OPG's financial results continues to exist due to volatility in the financial and commodity markets that affects the Nuclear Funds.

Commodity Markets

Changes in the market price of electricity or of the fuels used to produce electricity can adversely impact OPG's earnings and cash flow from operations.

To manage the risk of unpredictable increases in the price of fuels, the Company has fuel hedging programs, which include using fixed price and indexed contracts.

OPG's revenue from its unregulated assets is also affected by changes in the market or spot price of electricity. A $1/MWh change in the 2012 forecast average annual spot market price of electricity would impact OPG's gross margin by approximately $17 million.

The percentages of OPG's expected generation, fuel requirements and emission requirements hedged are shown below:

	2012	2013	2014
Estimated generation output hedged[1]	82%	81%	82%
Estimated fuel requirements hedged[2]	66%	59%	56%
Estimated nitric oxide ("NO") emission requirement hedged[3]	100%	100%	100%
Estimated SO_2 emission requirement hedged[3]	100%	100%	100%

1 Represents the portion of megawatt-hours of expected future generation production, including power purchases, for which the Company has sales commitments and contracts including the obligations under regulated pricing commitments, and agreements with the IESO, OEFC, and OPA.

2 Represents the approximate portion of megawatt-hours of expected generation production (and thermal year end inventory targets) from each type of facility (thermal and nuclear) for which OPG has entered into contractual arrangements or obligations in order to secure the price of fuel. Excess fuel in inventories in a given year is attributed to the next year for the purpose of measuring hedge ratios.

3 Represents the approximate portion of megawatt hours of expected thermal production for which OPG has purchased, been allocated or granted emission allowances and Emission Reduction Credits to meet OPG's obligations under Ontario Environmental Regulations 397/01.

Financial Markets

The market value of investments held by OPG's Nuclear Funds and the OPG registered pension plan could be significantly impacted by changes in various market factors such as equity prices, interest rates, inflation, and commodity prices.

Nuclear Funds Market Risk

The Decommissioning Fund and the Used Fuel Fund contain investment allocations to certain asset classes including fixed income securities as well as domestic and international equity securities. These funds are managed with the objective of generating sufficient returns over time to meet the associated nuclear waste and decommissioning obligations. The rates of return earned on these segregated funds are subject to various factors including the current and future financial markets conditions, which are inherently uncertain.

For the Used Fuel Fund, the Province guarantees the annual rate of return at 3.25 percent plus the change in the Ontario CPI for the first 2.23 million fuel bundles. A change in the value of the fund, as a result of changes in capital markets, related to the first 2.23 million bundles does not impact OPG's earnings. Unlike contributions subject to the Province's rate of return guarantee, OPG assumes the market risk for investment of funds set aside for incremental bundles.

The performance of the Nuclear Funds related to stations leased to Bruce Power is subject to the Bruce Lease Net Revenues Variance Account established by the OEB. The variance account partially mitigates market risk related to the Nuclear Funds as it captures the differences between actual and forecast earnings from the Nuclear Funds as they relate to the nuclear generating stations leased to Bruce Power. Forecast earnings refer to those approved by the OEB in setting regulated nuclear prices.

Post Employment Benefit Obligations

OPG's post employment benefit obligations include pension, group life insurance, health care and long-term disability benefits. OPG's post employment benefit obligations and costs, and OPG's registered pension plan contributions could be materially affected in the future by numerous factors, including: changes in actuarial assumptions; future investment returns; experience gains and losses; the current funded status of the pension and other benefit plans; changes in benefits; changes in the regulatory environment including potential changes to the *Pension Benefits Act* (Ontario); divestitures; and the measurement uncertainty incorporated into the actuarial valuation process.

The OPG registered pension plan is a contributory defined benefit plan that is indexed to inflation and covers most employees and retirees. Contributions to the OPG registered pension plan are determined by actuarial valuations, which are filed with the appropriate regulatory authorities at least every three years. An actuarial valuation of the OPG registered pension plan was completed as of January 1, 2011. Based on the actuarial valuation, OPG increased its annual contribution to the plan from $270 million in 2010 to $300 million in 2011. For 2012, OPG's contribution is expected to be $370 million. The estimated contribution for 2013 of $315 million is based on the 2011 contribution adjusted for the expected change in current service cost. The amount of OPG's additional voluntary contribution, if any, is revisited on an annual basis. OPG will continue to assess the requirements for contributions to the pension plan.

Foreign Exchange and Interest Rate Markets

OPG's earnings and cash flows can be impacted by movements in the United States dollar relative to the Canadian dollar and by prevailing interest rates on its borrowings and investment programs.

OPG's financial results are exposed to volatility in the Canadian/US foreign exchange rate as fuels purchased for nuclear generating stations are paid in US dollars. The magnitude of the impact of this volatility is largely a function of the quantity of the fuels purchased. In addition to this exposure, the market price of electricity in Ontario is influenced by the exchange rate because of the interaction between the Ontario and neighbouring US interconnected electricity markets. In order to manage this risk, OPG employs various financial instruments such as forwards and other derivative contracts in accordance with approved risk management policies.

The majority of OPG's existing debt is at fixed interest rates. Interest rate risk arises with the need to undertake new financing and with the potential addition of variable rate debt. The management of these risks is undertaken by using derivatives to hedge the exposure in accordance with corporate risk management policies. OPG periodically uses interest rate swap agreements to mitigate elements of interest rate risk exposure associated with anticipated new financing. As at December 31, 2011, OPG had total interest rate swap contracts outstanding with a notional principal of $792 million.

Trading

OPG's financial performance can be affected by its trading activities.

OPG's trading operations are closely monitored and total exposures are measured and reported to senior management on a daily basis. The metric used to measure the financial risk of this trading activity is known as "Value at Risk" or "VaR", which is defined as a probabilistic maximum potential future loss expressed in monetary terms for a portfolio based on normal market conditions over a set period of time. For 2011, the utilization of VaR fluctuated between nil and $0.5 million compared to between $0.1 million and $0.4 million for 2010.

Credit

Deterioration in counterparty credit and non-performance by suppliers can adversely impact OPG's earnings and cash flows from operations.

The Company's credit risk exposure is a function of its electricity sales, trading, and hedging activities, treasury activities including investing, and commercial transactions with various suppliers of goods and services. OPG's credit risk exposure relating to electricity sales is considered low as the majority of sales are through the IESO-administered spot market. The IESO oversees the credit worthiness of all market participants.

Other major components of credit risk exposure include those associated with vendors that are contracted to provide services or products. OPG manages its exposure to various suppliers or "counterparties" by evaluating the financial condition of all counterparties and ensuring that appropriate collateral or other forms of security are held by OPG.

The following table summarizes OPG's credit exposure to all counterparties from electricity transactions and trading as at December 31, 2011:

Credit Rating[1]	Number of Counterparties[2]	Potential Exposure[3] (millions of dollars)	Potential Exposure for Largest Counterparties: Number of Counterparties	Potential Exposure for Largest Counterparties: Counterparty Exposure (millions of dollars)
Investment grade	30	11	3	6
Below investment grade	4	15	2	14
IESO[4]	1	327	1	327
Total	35	353	6	347

1 Credit ratings are based on OPG's own analysis, taking into consideration external rating agency analysis where available, as well as recognizing explicit credit support provided through parental guarantees, Letters of Credit or other forms of security.
2 OPG's counterparties are defined on the basis of individual master agreements.
3 Potential exposure is OPG's statistical assessment of maximum exposure over the life of each transaction at a 95 percent confidence interval.
4 Credit exposure to the IESO peaked at $686 million during the year ended December 31, 2011 and peaked at $768 million during the year ended December 31, 2010.

Liquidity

Rising liquidity requirements can impact OPG's capital investment projects.

OPG operates in a capital intensive business. Significant financial resources are required to fund capital improvement projects. In addition, the Company has other significant disbursement requirements including investment in new generating capacity, annual funding obligations under the ONFA, pension contributions, payments towards OPEB and other benefit plans and continuing debt maturities with the OEFC. OPG must ensure it has the financial capacity and sufficient access to cost-effective financing sources to fund its capital requirements. A discussion of corporate liquidity is included in the *Liquidity and Capital Resources* section.

Nuclear Waste Obligations

The cost estimates of nuclear waste obligations are based on assumptions such as station end of life dates and nuclear waste volume that are inherently uncertain.

OPG is responsible for the management of used nuclear fuel, L&ILW, and eventual decommissioning of all of its nuclear facilities including the stations on lease to Bruce Power, as required by the CNSC. OPG is required by various rules and regulations to provide cost estimates associated with its nuclear waste management and decommissioning obligations. These cost estimates are based on numerous underlying assumptions including station end of life dates and waste volume that are inherently uncertain. To address the inherent uncertainty, OPG undertakes to review the underlying assumptions and baseline cost estimates at least once every five years. Certain underlying assumptions, such as station end of life dates and forecast for nuclear waste volumes, are reviewed and updated annually, with resulting changes assessed for their impact to the liability. Changing business decisions, such as refurbishment decisions and premature unit closures, are reviewed as they occur and OPG uses the existing baseline cost information to estimate the impacts to the nuclear liability balance. Should changing circumstances be assessed as material or significant, an early re-assessment of baseline costs could be performed before the five-year period is completed.

During 2011, OPG recorded an update to the cost estimates for its nuclear decommissioning and waste management obligations, which are described under the heading, *Critical Accounting Policies and Estimates.*

Regulatory Risks

OPG is subject to extensive federal and provincial legislation and regulations that have an impact on OPG's operations and financial position.

OPG is subject to regulation by various entities including the OEB and the CNSC. The risks that arise from being a regulated entity include: the potential inability to receive full recovery of capital and operating costs; reductions in earnings; and increases in the operating costs. These unfavourable impacts are mitigated by maintaining close contact with regulators and issuers of standards and codes to ensure early identification and discussion of issues.

Rate Regulation

Significant uncertainties remain regarding the outcome of rate proceedings, which determine the regulated prices for OPG's rate regulated operations.

The prices for electricity generated from most of OPG's baseload hydroelectric facilities and all of the nuclear facilities that it operates are determined by the OEB, currently on a forecast cost of service methodology. As with any regulated price established using a forecast cost of service methodology, there is an inherent risk that the prices established by the regulator may not provide for recovery of all actual costs incurred by the regulated operations, or allow the regulated operations to earn the allowed rate of return.

In March 2011, the OEB issued its decision on OPG's application for new regulated prices effective March 1, 2011. In April 2011, OPG filed a notice of appeal with the Court related to the part of the OEB's decision disallowing recovery in regulated prices of a portion of OPG's nuclear compensation costs. This matter was heard in October 2011 with supplemental submissions in January 2012. In its decision released on February 14, 2012, the Court dismissed the appeal by a 2 to 1 majority. OPG is reviewing the implications of this decision and the dissenting opinion.

The measurement of regulatory assets and liabilities is subject to certain estimates and assumptions, including assumptions made in the interpretation of the OEB's decisions and *Ontario Regulation 53/05*, pursuant to the *Ontario Energy Board Act, 1998*. The estimates and assumptions made in the interpretation of the OEB's decisions and *Ontario Regulation 53/05* are reviewed as part of the OEB's regulatory process.

OPG expects to file its next cost of service application for new regulated prices with the OEB in the second quarter of 2012.

Nuclear Regulatory Requirements

An aging nuclear fleet, a change in technical codes or laws may increase the risk of non-compliance with the nuclear regulatory requirements.

The uncertainty associated with nuclear regulatory requirements is primarily driven by plant aging, technology risks and changes to technical codes. Proactively addressing these requirements adds to the cost of operations, and in some instances, may result in a reduction or elimination of the productive capacity of a plant, or in the earlier than planned replacement of a plant component.

Enterprise-Wide Risks

OPG's business prospects could be adversely affected by various enterprise-wide risks such as electricity demand and supply, human resources, health and safety, and corporate reputation.

Significant risks that could have a potential enterprise-wide impact on OPG's business, reputation, financial condition, operating results and prospects are discussed below.

Electricity Demand and Supply

OPG's generation may be displaced to the extent renewable energy resources come on line under the Green Energy Act.

The *Green Energy Act* is expected to provide a significant amount of additional electricity from renewable energy sources. The potential for other producers to add significant amounts of non-dispatchable renewable resources may impact OPG's future operations.

Lower than forecast primary demand combined with increased baseload generating sources could result in SBG conditions. This may cause OPG to spill water from hydroelectric generating units and reduce generation output of nuclear units. SBG conditions could cause a decline in OPG's revenue. The extent to which SBG conditions could occur depends upon various factors such as electricity demand, the amount of renewable energy generation, and weather and water conditions. The OEB has authorized the Hydroelectric SBG Variance Account, effective March 1, 2011, which may mitigate the financial impact of regulated hydroelectric spill due to SBG conditions.

Human Resources

OPG's financial position could be affected if skilled human resources are not available or aligned with its operations.

The risk associated with the alignment and/or availability of skilled and experienced resources continues to exist for OPG. In order to mitigate the impact of this risk, OPG has embarked upon an organization-wide workforce planning effort, and has established ongoing monitoring processes to re-assess risks, issues and opportunities related to staffing on a regular basis. OPG also continues to focus on succession planning, leadership development and knowledge retention programs to improve the capability of its workforce. OPG expects to meet the human resource needs of the business by accommodating attrition through realigning of work and streamlining processes.

As of December 31, 2011, approximately 89 percent of OPG's regular labour force was represented by a union. In addition to the regular workforce, construction work is performed through 22 craft unions with established bargaining rights on OPG facilities.

Health and Safety

OPG's safety management and risk control program is designed to effectively manage safety risks in high risk areas.

OPG's operations expose employees and contractors to various occupational safety risks and hazards. The Company is committed to achieving its goal of zero injuries and continuous improvement through maintenance of formal safety management systems at the corporate and site levels based on the British Standard Institution's OHSAS Standard. These systems serve to focus OPG on proactively managing safety risks. Current corporate-wide risk reduction priorities are focused on improving falling object prevention programs and improving the application of work protection processes.

Corporate Reputation

OPG is exposed to reputational risk associated with changes in the opinion of various stakeholders regarding its public profile. OPG undertakes various assurance and risk management activities to manage risks to its corporate reputation.

As a provider of a large portion of the Province's electricity requirements, maintaining a positive corporate reputation is critical for OPG. OPG focuses on building and maintaining its reputation through many practices, including corporate citizenship initiatives across the Province, appropriate and transparent governance practices, and effective communication with stakeholders. In addition, OPG undertakes continuous improvement initiatives in various assurance and risk management activities.

Transmission and Interconnection Systems

OPG could face transmission constraints, which could impact its operations and ability to supply electricity to the Ontario and interconnected electricity markets.

OPG depends on the capacity and reliability of the transmission and interconnection systems that connect its generators with customers in Ontario and interconnected markets. In Ontario, the capacity of such transmission systems is limited under certain conditions, and OEB approval is required for its expansion. OPG may also face transmission constraints in interconnected markets. The capacity and operating reliability of such interconnection, transmission, and distribution systems are factors beyond OPG's control, and any capacity limitations, restrictions on access or reductions in operating reliability could affect the supply of electricity by OPG to customers in Ontario and interconnected markets. This could result in a significant loss in generation revenues and increased costs.

Ownership by the Province

OPG's commitment to maximize the return on the Shareholder's investment in OPG's assets may compete with the obligation of the Shareholder to respond to a broad range of matters.

The Province owns all of OPG's issued and outstanding common shares. Accordingly, the Province determines the composition of the OPG's Board of Directors and can directly influence major decisions. OPG's corporate interests and the wider interests of the Province may compete as a result of the obligation of the Province to respond to a broad range of matters, including the regulation of Ontario's electricity industry, the regulation of environmental matters, the allocation between OPG and the Province of the costs involved in nuclear waste management, the reduction of the stranded debt from the revenues of the electricity industry, any future sale by the Province of all or any of the Company's assets or common shares, and the determination of the amount of payments to be made by the Company to the Province by way of dividends or taxes. OPG is committed to operational excellence, maintaining positive stakeholder relationships and maximizing the return on its assets.

In 2008, the former Ministry of Energy announced that OPG's Lakeview site would no longer be considered for electricity generation. In 2011, the City of Mississauga, the Province and OPG entered into a Memorandum of Understanding (MOU") to develop a shared vision for the potential future use of OPG's Lakeview site. Preliminary work under the MOU has commenced. The outcome of this process is unknown at this time but may have a significant impact on the value of OPG's Lakeview site.

Information Technology

OPG's ability to operate effectively is in part dependent on effectively managing its Information Technology ("IT") requirements. IT system failures may have an adverse impact on OPG.

OPG's ability to operate effectively is in part dependent upon developing or subcontracting and managing a complex IT systems infrastructure. Failure to meet IT requirements could result in future system failures, or an inability to align information technology systems. OPG closely monitors its information technology system and service requirements.

Suppliers

Non-performance by strategic suppliers or an inability to diversify the supplier base could adversely impact the financial results and reputation of OPG.

OPG's ability to operate effectively is in part dependent upon access to equipment, materials and service suppliers. Loss of key equipment, materials and service suppliers, particularly for the nuclear business, could affect OPG's ability to operate effectively. OPG mitigates this risk to the extent possible through effective contract negotiations, contract language, vendor monitoring, and diversification of its supplier base.

Interconnected Electricity Markets

OPG may not be able to compete successfully in interconnected markets due to various market and regulatory factors.

OPG's ability to compete in interconnected electricity markets depends upon many external factors, including: the cost to transmit electricity to these markets; the price of electricity in these markets; the competitive actions of other generators and power marketers; the state of deregulation in Ontario and the interconnected markets; currency exchange rates; any new trade limitations; OPG retaining a Federal Energy Regulatory Commission licence; and costs to comply with environmental standards imposed in these markets. There can be no assurance that OPG will continue to compete successfully in interconnected markets.

Leases and Partnerships

OPG's financial performance could be affected if the risks associated with its leases and partnerships materialize.

OPG has leased its Bruce nuclear generating stations to Bruce Power and is a party to a number of partnerships related to the ownership and operation of generating stations. Each of these generating stations is subject to numerous operational, financial, regulatory, and environmental risk factors.

In addition, under the Bruce Lease, lease revenue is reduced in each calendar year where the annual arithmetic Average HOEP falls below $30/MWh and certain other conditions are met. The conditional reduction to revenue in the future, embedded in the terms of the Bruce Lease, is treated as a derivative according to CICA Handbook Section 3855. Derivatives are measured at fair value and changes in fair value are recognized in the consolidated statements of income. As a result of an expected decrease in future annual Average HOEP, the fair value of the derivative liability increased to $186 million at December 31, 2011 compared to $163 million at December 31, 2010. The exposure will continue until the Bruce units that are subject to this mechanism are no longer in operation, specific units are refurbished, or when the lease agreement is terminated. This exposure is mitigated as part of the OEB regulatory process, since the revenue from the lease of the Bruce generating stations is included in the determination of nuclear regulated prices and is subject to the Bruce Lease Net Revenues Variance Account.

Natural or Unexpected Events

OPG's operational continuity and the safety of its various stakeholders are exposed to the potential effects of unpredictable incidents and developments such as natural disasters and accidents.

OPG is exposed to incidents, hazards or developments, such as natural disasters or an influenza pandemic that could threaten the safety of various stakeholders, and/or the continuity of OPG's business operations. OPG may be exposed to a significant event that it is not fully insured or indemnified against, or to a party that fails to meet its indemnification obligations.

OPG's Emergency Management program is designed to ensure operational continuity and to respond to incidents or developments that could threaten the safety of stakeholders. The program goals are to protect the health and safety of employees, the public and responders, the environment and OPG's assets and reputation. The program elements are designed to meet legal and regulatory requirements.

First Nations and Métis Communities

The outcome of negotiations with the First Nations and Métis communities in Ontario depends on many factors such as legislation and precedents created by court rulings.

The Aboriginal and treaty rights of Aboriginal communities are recognized and affirmed in the *Constitution Act, 1982*. OPG may be subject to claims by First Nations and Métis communities, and other Aboriginal groups and individuals stemming from generation development, the historic operations of Ontario Hydro that related to First Nations and Métis title or rights, or the absence of permits, rights-of-way, easements, or similar rights in respect of lands held for First Nation bands or bodies under the *Indian Act* (Canada) and similar past grievances.

OPG has a First Nations and Métis Relations Policy, which sets out its commitment to build and maintain positive relationships with the First Nations and Métis communities. OPG has been successful in resolving some past grievances. However, the outcome of the ongoing and future negotiations with the First Nations and Métis communities depends on a number of factors, including legislation and regulations, which are subject to change over time. Precedents created by court rulings also impact negotiations and resolution of past grievances.

Environmental Risks

OPG may be subject to fines, penalties, and claims, if it is not in compliance with the applicable environmental laws. Changes in environmental regulations can result in existing operations being in a state of non-compliance, a potential inability to comply, potential liabilities, and costs for OPG.

Changes to environmental laws could create compliance risks and result in potential liabilities that may be addressed by the installation of control technologies, the purchase of emission reduction credits, allowances or offsets, or by constraining electricity production. Further, some of OPG's activities have the potential to impair natural habitat, damage aquatic or terrestrial plant and wildlife, or cause contamination to land or water that may require remediation. In addition, a failure to comply with applicable environmental laws may result in enforcement actions, including the potential for orders or charges.

In the second quarter of 2011, the Province announced that it will be implementing a GHG cap-and-trade regime after 2012. Therefore, there is a risk of incurring material costs to purchase allowances or offsets against GHG emissions from coal, oil and natural gas generation. For further details on OPG's environmental performance and policies refer to the *Vision, Core Business and Strategy* section.

RELATED PARTY TRANSACTIONS

Given that the Province owns all of the shares of OPG, related parties include the Province, Infrastructure Ontario, OPA and the other successor entities of Ontario Hydro, including Hydro One Inc. ("Hydro One"), the IESO, and the OEFC. The transactions between OPG and related parties are measured at the exchange amount, which is the amount of consideration established and agreed to by the related parties.

These transactions are summarized below:

(millions of dollars)	Revenue	Expenses	Revenue	Expenses
	2011		2010	
Hydro One				
Electricity sales	**16**	**–**	18	–
Services	**–**	**13**	–	16
Province of Ontario				
GRC, water rentals and land tax	**–**	**122**	–	116
Guarantee fee	**–**	**8**	–	7
Used Fuel Fund rate of return guarantee	**266**	**–**	–	186
OEFC				
GRC and proxy property tax	**–**	**217**	–	208
Interest expense on long-term notes	**–**	**196**	–	203
Capital tax	**–**	**(10)**	–	11
Income taxes, net of investment tax credits	**–**	**(54)**	–	77
Contingency support agreement	**367**	**–**	258	–
Infrastructure Ontario				
Reimbursement of expenses incurred during the procurement process for new nuclear units	**–**	**(2)**	–	3
IESO				
Electricity sales	**3,983**	**43**	4,215	27
Ancillary services	**55**	**–**	61	–
OPA	**155**	**–**	142	–
	4,842	**533**	4,694	854

As at December 31, 2011, accounts receivable included $3 million (2010 – $3 million) due from Hydro One, $327 million (2010 – $129 million) due from the IESO, and $57 million (2010 – $22 million) due from the OPA. Accounts payable and accrued charges at December 31, 2011 included $7 million (2010 – $2 million) due to Hydro One and $1 million (2010 – $3 million) due to Infrastructure Ontario.

CORPORATE GOVERNANCE AND AUDIT AND FINANCE COMMITTEE INFORMATION

Disclosures related to Corporate Governance and Audit and Finance Committee Information are included in OPG's 2011 Annual Information Form ("AIF").

INTERNAL CONTROLS OVER FINANCIAL REPORTING AND DISCLOSURE CONTROLS

Management, including the President and Chief Executive Officer ("President and CEO") and the CFO, are responsible for maintaining Disclosure Controls and Procedures ("DC&P") and Internal Controls over Financial Reporting ("ICOFR"). DC&P is designed to provide reasonable assurance that all relevant information is gathered and reported to senior management, including the President and CEO and the CFO, on a timely basis so that appropriate decisions can be made regarding public disclosure. ICOFR is designed to provide reasonable assurance regarding the reliability of financial reporting and the preparation of the financial statements in accordance with Canadian GAAP.

An evaluation of the effectiveness of design and operation of OPG's DC&P and ICOFR was conducted as of December 31, 2011. Management, including the President and CEO and the CFO, concluded that, as of December 31, 2011, OPG's DC&P and ICOFR (as defined in National Instrument 52-109 – *Certification of Disclosure in Issuers' Annual and Interim Filings, of the Canadian Securities Administrators)* were effective.

There were no material changes in OPG's ICOFR for the most recent interim period that have materially affected or are reasonably likely to materially affect OPG's ICOFR.

FOURTH QUARTER

Discussion of Results

Three Months Ended December 31 (millions of dollars) (unaudited)	**2011**	2010
Regulated generation sales	**837**	848
Spot market sales, net of hedging instruments	**94**	156
Variance accounts	**28**	54
Other	**293**	265
Revenue	**1,252**	1,323
Fuel expense	**188**	184
Gross margin	**1,064**	1,139
Operations, maintenance and administration	**730**	728
Depreciation and amortization	**173**	173
Accretion on fixed asset removal and nuclear waste management liabilities	**176**	165
Earnings on nuclear fixed asset removal and nuclear waste management funds	**(223)**	(200)
Restructuring due to coal unit closures	**2**	2
Property and capital taxes	**13**	14
Income before other (gains) losses, interest, and income taxes	**193**	257
Other (gains) losses	**(24)**	6
Income before interest and income taxes	**217**	251
Net interest expense	**44**	46
Income before income taxes	**173**	205
Income tax (recovery) expense	**(74)**	3
Net income	**247**	202

Revenue

Revenue was $1,252 million for the three months ended December 31, 2011 compared to $1,323 million during the same period in 2010. The decrease of $71 million was primarily due to the cessation of additions to the Tax Loss Variance Account based on the OEB's decision effective March 1, 2011, lower generation from the unregulated hydroelectric and nuclear segments, and lower sales prices for the unregulated and regulated hydroelectric segments during the three months ended December 31, 2011 compared to the same period in 2010.

The conditional reduction to revenue in the future, embedded in the terms of the Bruce Lease, is treated as a derivative according to CICA Handbook Section 3855. Derivatives are measured at fair value and changes in fair value are recognized in the consolidated statements of income. As a result of a decrease in expected future Average HOEP during the fourth quarter of 2011, the fair value of the derivative liability increased by $22 million. For the same period in 2010, the fair value of the derivative liability declined by $2 million. These changes to the lease revenue in 2011 and 2010 were offset by the impact of the Bruce Lease Net Revenues Variance Account.

Fuel Expense

Fuel expense was $188 million for the three months ended December 31, 2011 compared to $184 million during the same period in 2010. The increase of $4 million was primarily due to higher nuclear fuel prices, partially offset by lower generation at OPG's thermal generating stations.

Operations, Maintenance and Administration

OM&A expenses for the three months ended December 31, 2011 were $730 million compared to $728 million for the same quarter in 2010. The increase of $2 million was primarily due to higher pension and OPEB costs net of the impact of the Pension and OPEB Cost Variance Account, and higher nuclear maintenance, project and outage costs. The increase was largely offset by a decrease in expenditures for new nuclear generation development and capacity refurbishment activities, net of the impact of related regulatory variance accounts.

Other (gains) losses

During the fourth quarter of 2011, OPG recognized a gain of $19 million as a result of a reduction to an environmental provision.

Average Revenue

The weighted average Ontario spot electricity market price, average revenue per kWh for all electricity generators in Ontario and OPG's average revenue per kWh from generation paid through the regulated prices, cost recovery or energy supply agreements and the Ontario electricity market, by reportable electricity generation segment, for the three months ended December 31, 2011 and 2010, were as follows:

Three Months Ended December 31 (¢/kWh)	2011	2010
Weighted average HOEP	**2.8**	3.3
Average revenue for all electricity generators in Ontario[1]	**7.3**	6.8
Regulated - Nuclear Generation	**5.5**	5.5
Regulated - Hydroelectric	**3.4**	3.7
Unregulated - Hydroelectric	**2.9**	3.3
Unregulated - Thermal	**2.3**	3.2
Average revenue for OPG[2]	**5.4**	5.3

1 Computed as the total of average HOEP and average global adjustment payments.

2 Includes other energy revenues primarily from cost recovery agreements for the Nanticoke, Lambton and Lennox generating stations, and revenue from HESA agreements for the hydroelectric generating stations. Had these other energy revenues been excluded, OPG's average revenue for the fourth quarter of 2011 and 2010 would have been 4.6¢/kWh.

The change in average revenue for the Regulated - Hydroelectric segment for 2011 reflects the OEB's March 2011 decision establishing new regulated prices effective March 1, 2011, as discussed under the heading, *Recent Developments*.

The decrease in OPG's average revenue for the unregulated segments for the three months ended December 31, 2011 compared to the same quarter in 2010 was primarily due to the impact of lower Ontario spot electricity market prices.

Electricity Generation

Three Months Ended December 31 (TWh)	2011	2010
Regulated - Nuclear Generation	**12.0**	12.4
Regulated - Hydroelectric	**5.0**	4.7
Unregulated - Hydroelectric	**2.8**	3.6
Unregulated - Thermal	**0.6**	1.0
Total electricity generation	**20.4**	21.7

Total electricity sales volume for the three months ended December 31, 2011 was 20.4 TWh compared to 21.7 TWh during the same period in 2010. The decrease was due to lower electricity generation from OPG's unregulated hydroelectric, thermal and nuclear generating stations, partially offset by higher generation from OPG's regulated hydroelectric generating stations.

During the fourth quarter of 2011 and 2010, the primary electricity demand in Ontario was 34.3 TWh and 34.9 TWh, respectively.

Liquidity and Capital Resources

Cash flow used in operating activities during the three months ended December 31, 2011 was $3 million compared to cash flow provided by operating activities of $130 million for the three months ended December 31, 2010. The decrease in cash flow was primarily due to lower cash receipts as a result of lower generation revenue, partially offset by lower fuel expense and OM&A expenditures.

Cash flow used in investing activities during the three months ended December 31, 2011 was $334 million compared to $280 million during the same period in 2010. The increase in cash flow used in investing activities was primarily due to higher capital expenditures for the Lower Mattagami project, the Darlington Refurbishment project, partially offset by lower capital expenditures for the Upper Mattagami and Hound Chute project.

Cash flow provided by financing activities during the three months ended December 31, 2011 was $164 million compared to $88 million for the three months ended December 31, 2010. The increase in cash flow was primarily due to the issuance of long-term debt for the Lower Mattagami project and the Niagara Tunnel during the fourth quarter of 2011.

QUARTERLY FINANCIAL HIGHLIGHTS

The following tables set out selected financial information from OPG's unaudited interim consolidated financial statements for each of the 12 most recently completed quarters. This financial information has been prepared in accordance with Canadian GAAP.

(millions of dollars) (unaudited)	2011 Quarters Ended December 31	September 30	June 30	March 31	Total
Revenue	**1,252**	**1,275**	**1,226**	**1,308**	**5,061**
Net income (loss)	**247**	**(96)**	**114**	**151**	**416**
Net income (loss) per share *(dollars)*	**$0.96**	**$(0.38)**	**$0.45**	**$0.59**	**$1.62**

(millions of dollars) (unaudited)	2010 Quarters Ended December 31	September 30	June 30	March 31	Total
Revenue	1,323	1,391	1,210	1,443	5,367
Net income (loss)	202	333	(29)	143	649
Net income (loss) per share *(dollars)*	$0.79	$1.29	$(0.11)	$0.56	$2.53

(millions of dollars) (unaudited)	2009 Quarters Ended December 31	September 30	June 30	March 31	Total
Revenue, after revenue limit rebate	1,390	1,345	1,397	1,481	5,613
Net income (loss)	67	259	306	(9)	623
Net income (loss) per share *(dollars)*	$0.26	$1.01	$1.20	$(0.04)	$2.43

Balance Sheet as at December 31

(millions of dollars)	**2011**	2010	2009
Total assets	**32,136**	29,577	27,584
Total long-term liabilities	**22,472**	20,178	18,180
Common shares outstanding *(millions)*	**256.3**	256.3	256.3

OPG's quarterly results are impacted by changes in demand primarily resulting from variations in seasonal weather conditions. Historically, OPG's revenues are higher in the first quarter of a fiscal year as a result of winter heating demands, and in the third quarter due to air conditioning and cooling demands.

Additional items that impacted net income (loss) in certain quarters above include the following:

- A decrease in gross margin during 2009 primarily due to lower generation at OPG's thermal and nuclear generating stations, a decrease in electricity sales prices in the unregulated generating segments, and higher fuel prices and fuel related costs at OPG's thermal generating stations, partially offset by the recognition of revenue related to a contingency support agreement established with the OEFC;
- A decrease in income in the first quarter of 2009 related to higher OM&A expenses primarily due to an increase in planned outage and maintenance activities, new nuclear generation development, and capacity refurbishment activities, net of the impact of related regulatory variance accounts, at OPG's nuclear generating stations;
- A decrease in income resulting from losses in the Nuclear Funds during the first quarter of 2009 primarily due to reductions in the Ontario CPI. Losses from the Nuclear Funds were partially mitigated by the impact of the Bruce Lease Net Revenues Variance Account for the portion of the losses from the Nuclear Funds related to the nuclear generating stations on lease to Bruce Power;
- Lower generation at OPG's nuclear generating stations during the second quarter of 2009, primarily due to a planned VBO at the Darlington nuclear generating station;
- An increase in gross margin during the second quarter of 2009 due to the recognition of a regulatory asset of $199 million, excluding interest, related to the Tax Loss Variance Account authorized by the OEB effective April 1, 2008;
- An increase in the earnings from the Nuclear Funds of $343 million and $550 million during the second and third quarters of 2009, respectively, compared to the same quarters in 2008 primarily due to improvements in valuation levels of global financial markets, partially offset by the reduction to the Bruce Lease Net Revenues Variance Account regulatory asset of $150 million and $106 million, respectively;
- A decrease in income of $25 million during the first quarter of 2010 resulted from the recognition of severance costs related to the decision to close two coal-fired units at each of the Lambton and Nanticoke coal-fired generating stations;
- An increase in income of $102 million during the second quarter of 2010 resulted from the decrease in income tax expense primarily due to a reduction in income tax liabilities as a result of the resolution of a number of tax uncertainties related to the completion of a tax audit for prior years;
- An increase in income during the third quarter of 2010 was primarily due to an increase in average sales prices for generation from the unregulated generating segments and increased earnings from the Nuclear Funds, partially offset by lower nuclear and hydroelectric generation and higher OM&A expenses;
- An increase in income during the fourth quarter of 2010 was primarily due to an increase in earnings from the Nuclear Funds of $144 million, partially offset by the reduction to the Bruce Lease Net Revenues Variance Account regulatory asset of $71 million;
- An increase in pension and OPEB costs in 2011, largely as a result of lower discount rates in 2011;
- A decrease in gross margin during the first quarter of 2011 primarily due to lower revenue recognized related to the energy supply contract for the Lennox generating station, cessation of additions to the Tax Loss Variance Account based on the OEB's March 2011 decision, and a decrease in thermal generation revenue, was partially offset by a decrease in fuel and fuel related costs and higher revenue related to a contingency support agreement established with the OEFC for the Nanticoke and Lambton coal-fired generating stations, and higher nuclear generation revenue;
- In its June 2011 decision, the OEB established the Pension and OPEB Cost Variance Account effective March 1, 2011. As a result, during the second quarter of 2011, OPG recorded a regulatory asset of $41 million related to this variance account, resulting in reductions to OM&A expenses and income tax expense of $30 million and $11 million, respectively; and
- During the third quarter of 2011, OPG recognized $19 million of restructuring charges due to severance costs related to the closure of the two coal-fired generating units at the Nanticoke generating station on December 31, 2011.

Additional information about our company, including its AIF, can be found on SEDAR at www.sedar.com.

SUPPLEMENTARY NON-GAAP FINANCIAL MEASURES

In addition to providing net income in accordance with Canadian GAAP, OPG's MD&A, audited consolidated financial statements as at and for the years ended December 31, 2011 and 2010 and the notes thereto, present certain non-GAAP financial measures. These financial measures do not have standard definitions prescribed by Canadian GAAP and therefore may not be comparable to similar measures disclosed by other companies. OPG utilizes these measures in making operating decisions and assessing its performance. Readers of the MD&A, consolidated financial statements and the notes thereto utilize these measures in assessing the Company's financial performance from ongoing operations. These non-GAAP financial measures have not been presented as an alternative to net income in accordance with Canadian GAAP as an indicator of operating performance.

The definitions of the non-GAAP financial measures are as follows:

(1) **ROE** is defined as net income divided by average shareholder's equity excluding accumulated other comprehensive income and is calculated as follows:

(millions of dollars – except where noted)	**2011**	2010
Average adjusted equity		
Shareholder's equity, beginning of year	**8,085**	7,481
Less: accumulated other comprehensive loss, beginning of year	**(69)**	(24)
Adjusted equity, beginning of year	**8,154**	7,505
Shareholder's equity, end of year	**8,393**	8,085
Less: accumulated other comprehensive loss, end of year	**(163)**	(69)
Adjusted equity, end of year	**8,556**	8,154
Average adjusted Shareholder's equity	**8,355**	7,830
ROE *(percent)*		
Net Income	**416**	649
Divided by: average adjusted equity	**8,355**	7,830
ROE *(percent)*	**5.0**	8.3

(2) **Gross margin** is defined as revenue less fuel expense.

(3) **Earnings** are defined as net income.

For further information, please contact:

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STATEMENT OF MANAGEMENT'S RESPONSIBILITY FOR FINANCIAL INFORMATION

Ontario Power Generation Inc.'s ("OPG") management is responsible for the presentation and preparation of the annual consolidated financial statements and Management's Discussion and Analysis ("MD&A").

The consolidated financial statements have been prepared in accordance with Canadian generally accepted accounting principles ("GAAP") and the requirements of the Ontario Securities Commission ("OSC"), as applicable. The MD&A has been prepared in accordance with the requirements of securities regulators, including National Instrument 51-102 of the Canadian Securities Administrators and its related published requirements.

The consolidated financial statements and information in the MD&A necessarily include amounts based on informed judgments and estimates of the expected effects of current events and transactions with appropriate consideration to materiality. Something is considered material if it is reasonably expected to have a significant impact on the Company's earnings, cash flow, value of an asset or liability, or reputation. In addition, in preparing the financial information we must interpret the requirements described above, make determinations as to the relevancy of information to be included, and make estimates and assumptions that affect reported information. The MD&A also includes information regarding the impact of current transactions and events, sources of liquidity and capital resources, operating trends, risks and uncertainties. Actual results in the future may differ materially from our present assessment of this information because future events and circumstances may not occur as expected.

In meeting our responsibility for the reliability of financial information, we maintain and rely on a comprehensive system of internal controls and internal audit, including organizational and procedural controls and internal controls over financial reporting. Our system of internal controls includes written communication of our policies and procedures governing corporate conduct and risk management; comprehensive business planning; effective segregation of duties; delegation of authority and personal accountability; careful selection and training of personnel; and accounting policies, which we regularly update. This structure ensures appropriate internal control over transactions, assets and records. We also regularly audit internal controls. These controls and audits are designed to provide us with reasonable assurance that the financial records are reliable for preparing financial statements and other financial information, assets are safeguarded against unauthorized use or disposition, liabilities are recognized, and we are in compliance with all regulatory requirements.

Management, including the President and Chief Executive Officer ("CEO") and Chief Financial Officer ("CFO"), is responsible for maintaining disclosure controls and procedures ("DC&P") and internal control over financial reporting ("ICOFR"). DC&P is designed to provide reasonable assurance that all relevant information is gathered and reported to senior management, including the President and CEO and the CFO, on a timely basis so that appropriate decisions can be made regarding public disclosure. ICOFR is designed to provide reasonable assurance regarding the reliability of financial reporting and the preparation of the financial statements in accordance with GAAP.

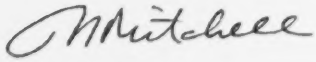
An evaluation of the effectiveness of design and operation of OPG's DC&P and ICOFR was conducted as of December 31, 2011. Accordingly, we, as OPG's President and CEO and CFO, will certify OPG's annual disclosure documents filed with the OSC, which includes attesting to the design and effectiveness of OPG's disclosure controls and procedures and internal control over financial reporting.

(continued on next page)

STATEMENT OF MANAGEMENT'S RESPONSIBILITY FOR FINANCIAL INFORMATION

The Board of Directors, based on recommendations from its Audit and Finance Committee, reviews and approves the consolidated financial statements and the MD&A, and oversees management's responsibilities for the presentation and preparation of financial information, maintenance of appropriate internal controls, management and control of major risk areas and assessment of significant and related party transactions.

The consolidated financial statements have been audited by Ernst & Young LLP, independent external auditors appointed by the Board of Directors. The Auditors' Report outlines the auditors' responsibilities and the scope of their examination and their opinion on OPG's consolidated financial statements. The independent external auditors, as confirmed by the Audit and Finance Committee, had direct and full access to the Audit and Finance Committee, with and without the presence of management, to discuss their audit and their findings therefrom, as to the integrity of OPG's financial reporting and the effectiveness of the system of internal controls.



Tom Mitchell
President and Chief Executive Officer

Donn W. J. Hanbidge
Chief Financial Officer

March 2, 2012

INDEPENDENT AUDITORS' REPORT

To the Shareholder of Ontario Power Generation Inc.

We have audited the accompanying consolidated financial statements of **Ontario Power Generation Inc.**, which comprise the consolidated balance sheets as at December 31, 2011 and 2010, and the consolidated statements of income, cash flows, changes in shareholder's equity and comprehensive income for the years then ended, and a summary of significant accounting policies and other explanatory information.

Management's Responsibility for the Consolidated Financial Statements

Management is responsible for the preparation and fair presentation of these consolidated financial statements in accordance with Canadian generally accepted accounting principles, and for such internal control as management determines is necessary to enable the preparation of consolidated financial statements that are free from material misstatement, whether due to fraud or error.

Auditors' Responsibility

Our responsibility is to express an opinion on these consolidated financial statements based on our audits. We conducted our audits in accordance with Canadian generally accepted auditing standards. Those standards require that we comply with ethical requirements and plan and perform the audit to obtain reasonable assurance about whether the consolidated financial statements are free from material misstatement.

An audit involves performing procedures to obtain audit evidence about the amounts and disclosures in the consolidated financial statements. The procedures selected depend on the auditors' judgment, including the assessment of the risks of material misstatement of the consolidated financial statements, whether due to fraud or error. In making those risk assessments, the auditors consider internal control relevant to the entity's preparation and fair presentation of the consolidated financial statements in order to design audit procedures that are appropriate in the circumstances, but not for the purpose of expressing an opinion on the effectiveness of the entity's internal control. An audit also includes evaluating the appropriateness of accounting policies used and the reasonableness of accounting estimates made by management, as well as evaluating the overall presentation of the consolidated financial statements.

We believe that the audit evidence we have obtained in our audits is sufficient and appropriate to provide a basis for our audit opinion.

Opinion

In our opinion, the consolidated financial statements present fairly, in all material respects, the financial position of **Ontario Power Generation Inc.** as at December 31, 2011 and 2010 and the results of its operations and its cash flows for the years then ended in accordance with Canadian generally accepted accounting principles.

Ernst & Young LLP

Toronto, Canada

March 2, 2012

Ernst & Young LLP

Chartered Accountants,
Licensed Public Accountants

CONSOLIDATED
STATEMENTS OF INCOME

Years Ended December 31 (millions of dollars – except where noted)	2011	2010
REVENUE (NOTE 18)	**5,061**	5,367
Fuel expense (NOTE 18)	**754**	900
GROSS MARGIN (NOTE 18)	**4,307**	4,467
EXPENSES (NOTE 18)		
Operations, maintenance and administration	**2,756**	2,913
Depreciation and amortization (NOTE 6)	**723**	688
Accretion on fixed asset removal and nuclear waste management liabilities (NOTE 10)	**702**	660
Earnings on nuclear fixed asset removal and nuclear waste management funds (NOTE 10)	**(509)**	(668)
Property and capital taxes	**51**	77
Restructuring (NOTE 25)	**21**	27
	3,744	3,697
INCOME BEFORE OTHER (GAINS) LOSSES, INTEREST, AND INCOME TAXES	**563**	770
Other (gains) losses (NOTES 4, 16, AND 17)	**(29)**	5
INCOME BEFORE INTEREST AND INCOME TAXES	**592**	765
Net interest expense (NOTE 9)	**165**	176
INCOME BEFORE INCOME TAXES	**427**	589
Income tax expense (recovery) (NOTE 11)		
Current	**(22)**	(67)
Future	**33**	7
	11	(60)
NET INCOME	**416**	649
BASIC AND DILUTED INCOME PER COMMON SHARE (DOLLARS)	**1.62**	2.53
COMMON SHARES OUTSTANDING (MILLIONS)	**256.3**	256.3

See accompanying notes to the consolidated financial statements

CONSOLIDATED
STATEMENTS OF CASH FLOWS

Years Ended December 31 (millions of dollars)	2011	2010
OPERATING ACTIVITIES		
Net income	**416**	649
Adjust for non-cash items:		
Depreciation and amortization (NOTE 6)	**723**	688
Accretion on fixed asset removal and nuclear waste management liabilities (NOTE 10)	**702**	660
Earnings on nuclear fixed asset removal and nuclear waste management funds (NOTE 10)	**(509)**	(668)
Pension and other post employment benefit costs (NOTE 12)	**445**	327
Future income taxes and other accrued charges	**(53)**	(89)
Provision for other liabilities	**(16)**	20
Provision for restructuring (NOTE 25)	**21**	27
Mark-to-market on derivative instruments	**24**	41
Provision for used nuclear fuel and low and intermediate level waste	**55**	43
Regulatory assets and liabilities (NOTE 7)	**(58)**	(233)
Other	**–**	22
	1,750	1,487
Contributions to nuclear fixed asset removal and nuclear waste management funds (NOTE 10)	**(250)**	(264)
Expenditures on nuclear fixed asset removal and nuclear waste management (NOTE 10)	**(172)**	(181)
Reimbursement of expenditures on nuclear fixed asset removal and nuclear waste management (NOTE 10)	**59**	100
Contributions to pension funds (NOTE 12)	**(302)**	(272)
Expenditures on other post employment benefits and supplementary pension plans (NOTE 12)	**(88)**	(82)
Expenditures on restructuring (NOTE 25)	**(13)**	(12)
Net changes to other long-term assets and liabilities	**33**	(6)
Net changes in non-cash working capital balances (NOTE 23)	**(27)**	47
Cash flow provided by operating activities	**990**	817
INVESTING ACTIVITIES		
Investment in fixed and intangible assets (NOTES 6 AND 18)	**(1,145)**	(978)
Net proceeds from sale of fixed assets	**7**	–
Net proceeds from sale of long-term investments (NOTE 4)	**–**	33
Cash flow used in investing activities	**(1,138)**	(945)
FINANCING ACTIVITIES		
Issuance of long-term debt (NOTE 8)	**1,052**	1,160
Repayment of long-term debt (NOTE 8)	**(383)**	(978)
Net (decrease) increase in short-term notes (NOTE 9)	**(145)**	155
Distribution to a third party on behalf of the Shareholder (NOTE 16)	**(14)**	–
Cash flow provided by financing activities	**510**	337
NET INCREASE IN CASH AND CASH EQUIVALENTS	**362**	209
CASH AND CASH EQUIVALENTS, BEGINNING OF YEAR	**280**	71
CASH AND CASH EQUIVALENTS, END OF YEAR	**642**	280

See accompanying notes to the consolidated financial statements

CONSOLIDATED BALANCE SHEETS

As at December 31 (millions of dollars)	2011	2010
ASSETS		
Current assets		
Cash and cash equivalents	642	280
Accounts receivable (NOTE 5)	461	270
Fuel inventory (NOTE 18)	655	734
Prepaid expenses	27	42
Income and capital taxes recoverable	55	65
Future income taxes (NOTE 11)	89	73
Materials and supplies (NOTE 18)	84	85
	2,013	1,549
Fixed assets (NOTES 6 AND 18)		
Property, plant and equipment	21,686	19,654
Less: accumulated depreciation	6,611	6,099
	15,075	13,555
Intangible assets (NOTES 6 AND 18)		
Intangible assets	363	345
Less: accumulated amortization	313	297
	50	48
Other long-term assets		
Deferred pension asset (NOTE 12)	1,188	1,146
Nuclear fixed asset removal and nuclear waste management funds (NOTES 10 AND 18)	11,898	11,246
Long-term investments (NOTE 21)	32	30
Long-term materials and supplies (NOTE 18)	380	400
Regulatory assets (NOTE 7)	1,457	1,559
Long-term accounts receivable and other assets	43	44
	14,998	14,425
	32,136	29,577

See accompanying notes to the consolidated financial statements

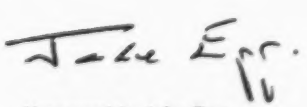
CONSOLIDATED
BALANCE SHEETS

As at December 31 (millions of dollars)	2011	2010
LIABILITIES		
Current liabilities		
Accounts payable and accrued charges	**836**	762
Long-term debt due within one year (NOTE 8)	**413**	385
Short-term notes payable (NOTE 9)	**10**	155
Deferred revenue due within one year	**12**	12
	1,271	1,314
Long-term debt (NOTE 8)	**4,484**	3,843
Other long-term liabilities		
Fixed asset removal and nuclear waste management (NOTES 10 AND 18)	**14,219**	12,704
Other post employment benefits and supplementary pension plans (NOTE 12)	**2,077**	1,908
Long-term accounts payable and accrued charges	**542**	525
Deferred revenue	**177**	152
Future income taxes (NOTE 11)	**819**	798
Regulatory liabilities (NOTE 7)	**154**	248
	17,988	16,335
Shareholder's equity		
Common shares (NOTE 15)	**5,126**	5,126
Retained earnings	**3,426**	3,024
Accumulated other comprehensive loss	**(163)**	(69)
Attributable to the Shareholder of Ontario Power Generation Inc.	**8,389**	8,081
Non-controlling interest (NOTE 24)	**4**	4
	8,393	8,085
	32,136	29,577

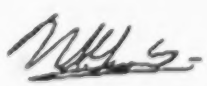
Commitments and Contingencies (NOTES 8, 12, 13, AND 16)

See accompanying notes to the consolidated financial statements

On behalf of the Board of Directors:



Honourable Jake Epp
Chairman



M. George Lewis
Director

CONSOLIDATED
STATEMENTS OF CHANGES IN SHAREHOLDER'S EQUITY

Years Ended December 31 (millions of dollars)	2011	2010
Common shares (NOTE 15)	**5,126**	5,126
Retained earnings		
Balance at beginning of year	**3,024**	2,375
Net income	**416**	649
Distribution to a third party on behalf of the Shareholder (NOTE 16)	**(14)**	–
Balance at end of year	**3,426**	3,024
Accumulated other comprehensive loss, net of income taxes		
Balance at beginning of year	**(69)**	(24)
Other comprehensive loss for the year	**(94)**	(45)
Balance at end of year	**(163)**	(69)
Attributable to the Shareholder of Ontario Power Generation Inc.	**8,389**	8,081
Non-controlling interest (NOTE 24)	**4**	4
	8,393	8,085

See accompanying notes to the consolidated financial statements

CONSOLIDATED
STATEMENTS OF COMPREHENSIVE INCOME

Years Ended December 31 (millions of dollars)	2011	2010
Net income	**416**	649
Other comprehensive loss, net of income taxes		
Net loss on derivatives designated as cash flow hedges[1]	**(100)**	(39)
Reclassification to income of losses (gains) on derivatives designated as cash flow hedges[2]	**6**	(6)
Other comprehensive loss for the year	**(94)**	(45)
Comprehensive income	**322**	604

1 Net of income tax recoveries of $20 million and $1 million for the years ended December 31, 2011 and 2010, respectively.
2 Net of income tax expense of $1 million and income tax recoveries of $4 million for the years ended December 31, 2011 and 2010, respectively.

See accompanying notes to the consolidated financial statements

NOTES TO THE CONSOLIDATED FINANCIAL STATEMENTS

For the years ended December 31, 2011 and 2010

NOTE 1 DESCRIPTION OF BUSINESS

Ontario Power Generation Inc. ("OPG" or the "Company") was incorporated on December 1, 1998 pursuant to the *Business Corporations Act* (Ontario) and is wholly owned by the Province of Ontario (the "Province"). OPG is an Ontario-based electricity generation company whose principal business is the generation and sale of electricity in Ontario. OPG's focus is on the efficient generation and sale of electricity from its generating assets, while operating in a safe, open and environmentally responsible manner.

NOTE 2 BASIS OF PRESENTATION

These consolidated financial statements were prepared in accordance with Canadian generally accepted accounting principles ("Canadian GAAP") as determined in Part V of the Canadian Institute of Chartered Accountants Handbook – Accounting ("CICA Handbook") and are presented in Canadian dollars. The preparation of financial statements in conformity with Canadian GAAP requires management to make estimates and assumptions that affect the reported amounts of assets, liabilities, revenue and expenses, and the disclosure of contingent assets and liabilities. Actual results could differ from those estimates.

The consolidated financial statements include the accounts of OPG and its subsidiaries. OPG accounts for its interests in jointly controlled entities using the proportionate consolidation method. In accordance with CICA Handbook Accounting Guideline 15, *Consolidation of Variable Interest Entities*, the applicable amounts in the accounts of the Nuclear Waste Management Organization ("NWMO") are included in OPG's consolidated financial statements. All significant intercompany transactions have been eliminated on consolidation.

Certain of the 2010 comparative amounts have been reclassified from financial statements previously presented to conform to the 2011 consolidated financial statement presentation.

NOTE 3 SUMMARY OF SIGNIFICANT ACCOUNTING POLICIES

Cash and Cash Equivalents and Short-Term Investments

Cash and cash equivalents include cash on deposit and money market securities with a maturity of less than 90 days on the date of purchase. All other money market securities with a maturity on the date of purchase that is greater than 90 days, but less than one year, are recorded as short-term investments. These securities are valued at the lower of cost and market.

Interest earned on cash and cash equivalents and short-term investments of $6 million (2010 – $2 million) at an average effective rate of 1.0 percent (2010 – 0.7 percent) is offset against interest expense in the consolidated statements of income.

Sales of Accounts Receivable

Asset securitization involves selling assets such as accounts receivable to independent entities or trusts, which buy the receivables and then issue interests in them to investors. These transactions are accounted for as sales, given that control has been surrendered over these assets in return for net cash consideration. For each transfer, the excess of the carrying value of the receivables transferred over the estimated fair value of the proceeds received is reflected as a loss on the date

of the transfer, and is included in net interest expense. The carrying value of the interests transferred is allocated to accounts receivable sold or interests retained according to their relative fair values on the day the transfer is made. Fair value is determined based on the present value of future cash flows. Cash flows are projected using OPG's best estimates of key assumptions, such as discount rates, weighted average life of accounts receivable and credit loss ratios.

As part of the sales of accounts receivable, certain financial assets are retained and consist of interests in the receivables transferred. Any retained interests held in the receivables are accounted for at cost. The receivables are transferred on a fully serviced basis and do not create a servicing asset or liability.

Inventories

Fuel inventory is valued at the lower of weighted average cost and net realizable value.

Materials and supplies are valued at the lower of average cost and net realizable value. The determination of net realizable value of materials and supplies takes into account various factors including the remaining useful life of the related facilities in which the materials and supplies are expected to provide future benefits.

Fixed and Intangible Assets and Depreciation and Amortization

Property, plant and equipment, and intangible assets are recorded at cost. Interest costs incurred during construction and development are capitalized as part of the cost of the asset based on the interest rate on OPG's long-term debt. Expenditures for replacements of major components are capitalized.

Depreciation and amortization rates for the various classes of assets are based on their estimated service lives. Any asset removal costs that have not been specifically provided for in current or previous periods are charged to operations, maintenance and administration ("OM&A") expenses. Repairs and maintenance are also expensed when incurred.

Fixed assets are depreciated on a straight-line basis except for computers, and transport and work equipment, which are mostly depreciated on a declining balance basis. Intangible assets, which consist of major application software, are amortized on a straight-line basis. As at December 31, 2011, the depreciation and amortization periods of fixed and intangible assets are as follows:

Nuclear generating stations and major components	15 to 59 years[1]
Thermal generating stations and major components	25 to 48 years[2]
Hydroelectric generating stations and major components	25 to 100 years
Administration and service facilities	10 to 50 years
Computers, and transport and work equipment assets - declining balance	9% to 40% per year
Major application software	5 years
Service equipment	5 to 10 years

1 As at December 31, 2011, the end of station life for depreciation purposes for the Darlington, Pickering A and B, and Bruce A and B nuclear generating stations ranges between 2014 and 2051. Major components are depreciated over the lesser of the station life and the life of the components. Changes to the end of station life for depreciation purposes are described under the heading *Changes in Accounting Policies and Estimates*.

2 Lambton units 1 and 2 and Nanticoke units 3 and 4 were fully depreciated by September 30, 2010. Nanticoke units 1 and 2 were fully depreciated by December 31, 2011.

Impairment of Fixed Assets

OPG evaluates its property, plant and equipment for impairment whenever conditions indicate that estimated undiscounted future net cash flows may be less than the net carrying amount of assets. In cases where the undiscounted expected future cash flows are less than the carrying amount, an impairment loss is recognized equal to the amount by which the carrying amount exceeds the fair value. Fair value is determined using expected discounted cash flows when quoted market prices are not available.

Rate Regulated Accounting

The *Ontario Energy Board Act, 1998* and *Ontario Regulation 53/05* provide that OPG receives regulated prices for electricity generated from the baseload hydroelectric facilities and all of the nuclear facilities that it operates. Beginning April 1, 2008, OPG's regulated prices for these regulated facilities are determined by the Ontario Energy Board ("OEB").

The OEB is a self-funding Crown corporation. Its mandate and authority come from the *Ontario Energy Board Act, 1998*, the *Electricity Act, 1998*, and a number of other provincial statutes. The OEB is an independent, quasi-judicial tribunal that reports to the Legislature of the Province through the Minister of Energy. It regulates market participants in the Province's natural gas and electricity industries and carries out its regulatory functions through public hearings and other more informal processes such as consultations.

Canadian GAAP recognizes that rate regulation can create economic benefits and obligations that are required by the regulator to be obtained from, or settled with, the ratepayers. When the Company assesses that there is sufficient assurance that incurred costs will be recovered in the future, those costs are deferred and reported as a regulatory asset. When the OEB provides recovery through current rates for costs that have not been incurred, and that are required to be refunded to the ratepayers, the Company records a regulatory liability.

Certain of the regulatory assets and liabilities recognized by the Company relate to variance and deferral accounts authorized by the OEB, including those authorized pursuant to *Ontario Regulation 53/05*. Variance accounts capture differences between actual costs and revenues, and the corresponding forecast amounts approved in the setting of regulated prices. The measurement of regulatory assets and liabilities is subject to certain estimates and assumptions, including assumptions made in the interpretation of *Ontario Regulation 53/05* and the OEB's decisions. These estimates and assumptions made in the interpretation of *Ontario Regulation 53/05* and the OEB's decisions are reviewed as part of the OEB's regulatory process.

Regulatory asset and liability balances for variance and deferral accounts approved by the OEB for inclusion in regulated prices are amortized based on approved recovery periods. Disallowed balances, including associated interest, are charged to operations in the period that the OEB's decision is issued. Interest is applied to regulatory balances as prescribed by the OEB, in order to recognize the cost of financing amounts to be recovered from, or repaid to, ratepayers.

Certain assets and liabilities arising from rate regulation have specific guidance under a primary source of Canadian GAAP that applies only to the particular circumstances described therein, including those arising under Section 1600, *Consolidated Financial Statements*, Section 3061, *Property, Plant and Equipment*, Section 3465, *Income Taxes*, and Section 3475, *Disposal of Long-Lived Assets and Discontinued Operations* of the CICA Handbook. Other assets and liabilities arising from rate regulation do not have specific guidance under a primary source of Canadian GAAP. Therefore, Section 1100, *Generally Accepted Accounting Principles* ("Section 1100") of the CICA Handbook directs the Company to adopt accounting policies that are developed through the exercise of professional judgment and the application of concepts described in Section 1000, *Financial Statement Concepts* of the CICA Handbook. In developing these accounting policies, the Company may consult other sources including pronouncements issued by bodies authorized to issue accounting standards in other jurisdictions. Therefore, in accordance with Section 1100, the Company has determined that its other assets and liabilities arising from rate regulation qualify for recognition under Canadian GAAP as this recognition is consistent with the United States Financial Accounting Standards Board Accounting Standards Codification Topic 980, *Regulated Operations*.

See Notes 7, 10, 11, and 12 to these consolidated financial statements for additional disclosures related to the OEB's decisions, regulatory assets and liabilities, and rate regulated accounting.

Investments in OPG Ventures

In accordance with CICA Handbook Accounting Guideline 18, *Investment Companies* ("AcG-18"), investments owned by the Company's wholly owned subsidiary OPG Ventures Inc. ("OPGV") are recorded at fair value, and changes to the fair value of the investments are included in revenue in the period in which the change occurs. The fair values of these investments are estimated using a methodology that is appropriate in light of the nature, facts and circumstances of the respective investments and considers reasonable data and market inputs, assumptions and estimates. See Notes 13 and 21 to these consolidated financial statements for additional disclosures related to OPG's investments in OPGV.

Fixed Asset Removal and Nuclear Waste Management Liabilities

OPG recognizes asset retirement obligations for fixed asset removal and nuclear waste management, discounted for the time value of money. OPG estimates both the amount and timing of future cash expenditures based on current plans for fixed asset removal and nuclear waste management. The liabilities are initially recorded at their estimated fair value, which is based on a discounted value of the expected costs to be paid.

On an ongoing basis, the liabilities for nuclear fixed asset removal and nuclear waste management ("Nuclear Liabilities") are increased by the present value of the variable cost portion for the nuclear waste generated each year, with the corresponding amounts charged to operating expenses. Variable expenses relating to low and intermediate level nuclear waste are charged to OM&A expenses. Variable expenses relating to the management and storage of nuclear used fuel are charged to fuel expense. The liabilities may also be adjusted due to any changes in the estimated amount or timing of the underlying future cash flows. Upon settlement of the liabilities, a gain or loss would be recorded.

Accretion arises because the liabilities for fixed asset removal and nuclear waste management are reported on a net present value basis. Accretion expense is the increase in the carrying amount of the liabilities due to the passage of time.

The asset retirement cost is capitalized by increasing the carrying value of the related fixed assets. The capitalized cost is depreciated over the remaining useful life of the related fixed assets and is included in depreciation and amortization expense.

Nuclear Fixed Asset Removal and Nuclear Waste Management Funds

Pursuant to the Ontario Nuclear Funds Agreement ("ONFA") between OPG and the Province, OPG established a Used Fuel Segregated Fund ("Used Fuel Fund") and a Decommissioning Segregated Fund ("Decommissioning Fund") (together the "Nuclear Funds"). The Used Fuel Fund is intended to fund expenditures associated with the management of highly radioactive used nuclear fuel bundles, while the Decommissioning Fund was established to fund expenditures associated with nuclear fixed asset removal and the disposal of low and intermediate level nuclear waste materials. OPG maintains the Nuclear Funds in third party custodial accounts that are segregated from the rest of OPG's assets.

The investments in the Nuclear Funds and the corresponding payables/receivables to/from the Province are classified as held-for-trading. The Nuclear Funds are measured at fair value based on the bid prices of the underlying securities with gains and losses recognized in net income.

Revenue Recognition

All of OPG's electricity generation is offered into the real-time energy spot market administered by the Independent Electricity System Operator ("IESO").

Revenue Recognition – Regulated Generation

Effective March 1, 2011, energy revenue generated from the nuclear facilities owned and operated by OPG is based on a regulated price of 5.59¢/kWh pursuant to the OEB's decision and order issued in March 2011 and April 2011, respectively, on the application for new regulated prices filed by OPG in May 2010. The nuclear regulated price includes a rate rider of 0.43¢/kWh for the recovery of approved nuclear variance and deferral account balances based on recovery periods authorized by the OEB. Effective March 1, 2011, energy revenue generated from OPG's regulated hydroelectric facilities receives a regulated price of 3.41¢/kWh, pursuant to the OEB's decision and order. The regulated hydroelectric regulated price is net of a negative rider of -0.17¢/kWh reflecting the repayment of the approved regulated hydroelectric variance account balances. These rate riders will remain in effect until December 31, 2012.

In its March 2011 decision, the OEB also approved the continuation of the existing hydroelectric incentive mechanism ("HIM") but determined that a portion of the resulting net revenues should be shared with ratepayers. As a result, the OEB established the Hydroelectric Incentive Mechanism Variance Account ("HIM Variance Account"). Under the existing mechanism, OPG receives the approved regulated price for the actual monthly average net energy production per hour from the regulated hydroelectric facilities, and in the hours where OPG's actual net energy production in Ontario is greater or less than the average net volume in the month, OPG's hydroelectric revenues are adjusted by the difference between the average hourly net volume and OPG's actual net energy production from the regulated hydroelectric facilities multiplied by the spot market price. The HIM Variance Account captures the net revenues from the HIM that are required to be returned to ratepayers.

For the period from April 1, 2008 to February 28, 2011, energy revenue generated from the nuclear facilities owned and operated by OPG was based on a regulated price of 5.50¢/kWh, including a rate rider of 0.20¢/kWh for the recovery of the approved nuclear variance and deferral account balances, pursuant to the OEB's 2008 decision and order. Pursuant

to that decision and order, effective April 1, 2008, the revenue from the regulated hydroelectric generation was based on a regulated price of 3.67¢/kWh, which included the recovery of the approved regulated hydroelectric variance accounts and, effective December 1, 2008, was subject to the HIM.

The regulated prices established by the OEB in effect prior to, and effective March 1, 2011 were determined using a forecast cost of service methodology. The forecast cost of service methodology establishes regulated prices based on a revenue requirement taking into account a forecast of production and operating costs for the regulated facilities, and a return on rate base. Rate base is a regulatory construct that represents the average net level of investment in regulated fixed and intangible assets and an allowance for working capital. The regulated prices effective March 1, 2011 were determined by the OEB based on an approved 24-month revenue requirement of $6.7 billion.

Revenue Recognition – Unregulated Generation and Other Revenue

Electricity generated from OPG's generating assets that are unregulated receives the Ontario electricity spot market price, except where a cost recovery or an energy supply agreement is in place.

The Lambton and Nanticoke generating stations are subject to a contingency support agreement with the Ontario Electricity Financial Corporation ("OEFC"). The agreement was put in place to enable OPG to recover the costs of those coal-fired generating stations following implementation of OPG's CO_2 emissions reduction strategy. Production from the Lennox generating station was subject to a Lennox Generating Station Agreement ("LGSA") with the Ontario Power Authority ("OPA") for the period from January 1, 2011 to December 31, 2011, which has been extended to June 30, 2012.

Generation from the Lac Seul and Ear Falls generating stations, Healey Falls generating station, and the Sandy Falls, Wawaitin, Lower Sturgeon, and Hound Chute generating stations are subject to a Hydroelectric Energy Supply Agreement ("HESA").

OPG also sells into, and purchases from, interconnected markets of other provinces and the U.S. northeast and midwest. All contracts that are not designated as hedges are recorded in the consolidated balance sheets at market value with gains or losses recorded in the consolidated statements of income. Gains and losses on energy trading contracts (including those to be physically settled) are recorded on a net basis in the consolidated statements of income. Accordingly, power purchases of $69 million were netted against revenue in 2011 and 2010.

OPG derives non-energy revenue under the terms of a lease arrangement and related agreements with Bruce Power L.P. related to the Bruce nuclear generating stations. This includes lease revenue and revenue for engineering analysis and design, technical and ancillary services. The minimum lease payments are recognized in revenue on a straight-line basis over the term of the lease.

OPG also earns revenue from its joint venture share of the Brighton Beach Power Limited Partnership ("Brighton Beach") related to an energy conversion agreement between Brighton Beach and Shell Energy North America (Canada) Inc. It also earns revenue from its 50 percent share of the results of the Portlands Energy Centre ("PEC") gas-fired generating station, which is co-owned with TransCanada Energy Ltd. In addition, non-energy revenue includes isotope sales and real estate rentals. Revenues from these activities are recognized as services are provided or as products are delivered.

Financial Instruments

Financial assets are classified as one of the following: held-to-maturity, loans and receivables, held-for-trading, or available-for-sale, and financial liabilities are classified as held-for-trading or other than held-for-trading. Financial assets and liabilities held-for-trading are measured at fair value with gains and losses recognized in net income. Financial assets held-to-maturity, loans and receivables, and financial liabilities other than those held-for-trading, are measured at amortized cost. Financial assets available-for-sale are measured at fair value with unrealized gains and losses due to fluctuations in fair value recognized in accumulated other comprehensive income ("AOCI"). Financial assets purchased and sold, where the contract requires the asset to be delivered within an established timeframe, are recognized on a trade-date basis. All derivatives, including embedded derivatives that must be separately accounted for, generally must be classified as held-for-trading and recorded at fair value in the consolidated balance sheets. Transaction costs are expensed as incurred for financial instruments classified or designated as held-for-trading.

CICA Handbook Section 3855, *Financial Instruments – Recognition and Measurement* ("Section 3855") permits designation of any financial instrument as held-for-trading (the fair value option) upon initial recognition. This designation by OPG requires that the financial instrument be reliably measurable, and eliminates or significantly reduces a measurement or recognition inconsistency that would otherwise arise from measuring assets or liabilities.

In accordance with CICA Handbook Section 3862, *Financial Instruments – Disclosures*, OPG categorizes its fair value measurements using a fair value hierarchy that reflects the significance of the inputs used in measuring the financial instruments. The fair value hierarchy has three levels. Fair value of assets and liabilities included in Level 1 is determined by reference to quoted prices in active markets for identical assets and liabilities. Assets and liabilities in Level 2 include valuations using inputs other than the quoted prices for which all significant inputs are based on observable market data, either directly or indirectly. Level 3 valuations are based on inputs that are not based on observable market data.

Derivatives and Hedges

CICA Handbook Section 3865, *Hedges* specifies the criteria under which hedge accounting can be applied and how hedge accounting is to be executed for each of the permitted hedging strategies: fair value hedges, cash flow hedges and hedges of a foreign currency exposure of a net investment in a self-sustaining foreign operation. In a cash flow hedging relationship, the effective portion of the change in the fair value of the hedging derivative is recognized in other comprehensive income. The ineffective portion is recognized in net income. The amounts recognized in AOCI are reclassified to net income in the periods in which net income is affected by the variability in the cash flows of the hedged item.

Hedge accounting is applied when the derivative instrument is designated as a hedge and is expected to be effective throughout the life of the hedged item. The fair value of such derivative instrument is included in AOCI on a net of tax basis and changes to the fair value are recorded on the consolidated statements of comprehensive income. When a derivative hedging relationship is expired, the designation of a hedging relationship is terminated, or a portion of the hedging instrument is no longer effective, any associated gains or losses included in AOCI are recognized in the current period's consolidated statement of income.

OPG is exposed to changes in market interest rates on debt expected to be issued in the future. OPG uses interest rate derivative contracts to hedge this exposure. Gains and losses on interest rate hedges are recorded as an adjustment to interest expense for the debt being hedged. Gains and losses that do not meet the effectiveness criteria are recorded in net income in the period incurred.

Some of OPG's unregulated generation is exposed to changes in electricity prices associated with a wholesale spot market for electricity in Ontario. All derivative contracts not designated as hedges are recorded as assets or liabilities at fair value with changes in fair value recorded in the Other category revenue (refer to Note 18).

OPG utilizes emission reduction credits ("ERCs") and allowances to manage emissions within the prescribed regulatory limits. ERCs are purchased from trading partners in Canada and the United States. Emission allowances are obtained from the Province and purchased from trading partners in Ontario. The cost of ERCs and allowances is held in inventory and charged to OPG's operations at average cost as part of fuel expense, as required.

Foreign Currency Translation

Monetary assets and liabilities denominated in foreign currencies are translated into Canadian currency at year end exchange rates. Any resulting gain or loss is reflected in revenue.

Research and Development

Research and development costs are charged to operations in the year incurred. Research and development costs incurred to discharge long-term obligations such as the nuclear waste management liabilities, for which specific provisions have already been made, are charged to the related liability.

Pension and Other Post Employment Benefits

OPG's post employment benefit programs include a contributory defined benefit registered pension plan, a defined benefit supplementary pension plan, group life insurance, health care and long-term disability benefits. Effective January 1, 2009, similar post employment benefit programs were established by the NWMO. Information on the Company's post employment benefit programs is presented on a consolidated basis.

OPG accrues its obligations under pension and other post employment benefit ("OPEB") plans. The obligations for pension and other post retirement benefit costs are determined using the projected benefit method pro-rated on service. The obligation for long-term disability benefits is determined using the projected benefit method on a terminal basis. Pension and OPEB obligations are impacted by factors including interest rates, adjustments arising from plan amendments, changes in assumptions, experience gains or losses, salary levels, inflation, and cost escalation. Pension and OPEB costs and obligations are determined annually by an independent actuary using management's best estimate assumptions.

Assumptions are significant inputs to actuarial models that measure pension and OPEB obligations and related effects on operations. Two critical assumptions – discount rate and inflation – are important elements in the determination of benefit costs and obligations. In addition, the expected return on assets is a critical assumption in the determination of registered pension plan costs. These assumptions, as well as other assumptions involving demographic factors such as retirement age, mortality, and employee turnover are evaluated periodically by management in consultation with an independent actuary. During the evaluation process, the assumptions are updated to reflect past experience and expectations for the future. Actual results in any given year will often differ from actuarial assumptions because of economic and other factors, and in accordance with Canadian GAAP, the impact of these differences is accumulated and amortized over future periods.

The discount rates used by OPG in determining projected benefit obligations and the costs for the Company's employee benefit plans are based on representative AA corporate bond yields. The respective discount rates enable OPG to calculate the present value of the expected future cash flows on the measurement date. A lower discount rate increases the present value of benefit obligations and increases benefit plan costs. The expected rate of return on plan assets is based on current and expected asset allocation, as well as the long-term historical risks and returns associated with each asset class within the plan portfolio. A lower expected rate of return on plan assets increases pension cost.

Pension fund assets include equity securities and corporate and government debt securities, real estate and other investments which are managed by professional investment managers. The fund does not invest in equity or debt securities issued by OPG. Pension fund assets are valued using market-related values for purposes of determining the amortization of actuarial gains or losses and the expected return on plan assets. The market-related value recognizes gains and losses on equity assets relative to a six percent assumed real return over a five-year period.

Pension and OPEB costs include current service costs, interest costs on the obligations, the expected return on pension plan assets, adjustments for plan amendments and adjustments for actuarial gains or losses, which result from changes in assumptions and experience gains and losses. Past service costs arising from pension and OPEB plan amendments are amortized on a straight-line basis over the expected average remaining service life to full eligibility of the employees covered by the plan. Due to the long-term nature of post employment liabilities, the excess of the net cumulative unamortized gain or loss, over 10 percent of the greater of the benefit obligation and the market-related value of the plan assets, is amortized over the expected average remaining service life, since OPG expects to realize the associated economic benefit over that period.

When the recognition of the transfer of employees and employee-related benefits gives rise to both a curtailment and a settlement, the curtailment is accounted for prior to the settlement. A curtailment is the loss by employees of the right to earn future benefits under the plan. A settlement is the discharge of a plan's liability.

Taxes

Under the *Electricity Act, 1998*, OPG is required to make payments in lieu of corporate income and, up to June 30, 2010, capital taxes to the OEFC. These payments are calculated in accordance with the *Income Tax Act* (Canada) and the *Taxation Act, 2007* (Ontario), as modified by regulations made under the *Electricity Act, 1998* and related regulations. This effectively results in OPG paying taxes similar to what would be imposed under the federal and Ontario tax acts.

OPG follows the liability method of accounting for income taxes. Under the liability method, future income tax assets and liabilities are determined based on differences between the accounting and tax bases of assets and liabilities and measured using the substantively enacted tax rates and laws that will be in effect when the differences are expected to reverse. The effect on future income tax assets and liabilities of a change in tax rates is included in income in the period the change is substantively enacted. Future income tax assets are evaluated and if realization is not considered more likely than not, a valuation allowance is established. In accordance with CICA Handbook Section 3465, *Income Taxes*, OPG recognizes future income taxes associated with its rate regulated operations and records an offsetting regulatory asset or liability for the future income taxes that are expected to be recovered or refunded through future regulated prices charged to customers.

OPG makes payments in lieu of property tax on its nuclear and thermal generating assets to the OEFC, and also pays property taxes to municipalities.

OPG pays charges on gross revenue derived from the annual generation of electricity from its hydroelectric generating assets. The gross revenue charge ("GRC") includes a fixed percentage charge applied to the annual hydroelectric generation derived from stations located on provincial Crown lands, in addition to graduated rate charges applicable to all hydroelectric stations. GRC costs are included in fuel expense.

Changes in Accounting Policies and Estimates

Business Combinations, Consolidated Financial Statements, and Non-controlling Interests

Effective January 1, 2011, OPG adopted the CICA Handbook Section 1582, *Business Combinations* ("Section 1582"), Section 1601, *Consolidated Financial Statements* ("Section 1601"), and Section 1602, *Non-controlling Interests* ("Section 1602"). Section 1582 specifies a number of changes, including an expanded definition of a business, a requirement to measure all business acquisitions at fair value, and a requirement to recognize acquisition-related costs as expenses. Section 1601 establishes the standards for preparing consolidated financial statements. Section 1602 specifies that non-controlling interests be treated as a separate component of equity, not as a liability or other item outside of equity. These standards shall be applied prospectively to business combinations whose acquisition date is on or after the date of adoption. As a result of adopting Section 1602, the Company has reclassified its non-controlling interests as a separate component of equity. The adoption of Section 1582 and Section 1601 did not have a material impact on the Company's consolidated financial statements as at and for the year ended December 31, 2011.

Depreciation of Long-Lived Assets

The accounting estimates related to the depreciation of long-lived assets require significant management judgment to assess the appropriate useful lives of OPG's long-lived assets, including consideration of various technological and other factors.

As a result of its decision to close two coal-fired units at each of the Lambton and Nanticoke coal-fired generating stations, effective September 2009, OPG revised the end of life dates for these units to October 2010 from December 2014. This change in estimate was accounted for on a prospective basis and increased depreciation expense by $29 million in 2010. In 2011, consistent with Ontario's Long-Term Energy Plan (the "Energy Plan") released in November 2010 and Supply Mix Directive issued by the OPA in February 2011, OPG has revised the end of life dates for two additional units at the Nanticoke generating station, for the purposes of calculating depreciation, to December 2011 from December 2014. This change in estimate was accounted for on a prospective basis and increased depreciation expense by $18 million in 2011. On December 31, 2011, these two units at the Nanticoke generating station were removed from service.

The service life of the Bruce A nuclear generating station, for the purposes of calculating depreciation, was extended from 2037 to 2042 to reflect the expected operating period for the refurbished units at the generating station. The life extension is expected to decrease depreciation expense by $5 million annually commencing January 2012, excluding the impact of the adjustment to the Nuclear Liabilities recorded in December 2011, which is discussed in the following section.

Liabilities for Fixed Asset Removal and Nuclear Waste Management

In February 2010, OPG announced its decision to commence the definition phase of the refurbishment of the Darlington nuclear generating station. Accordingly, the service life of the Darlington nuclear generating station, for the purposes of calculating depreciation, was extended from 2019 to 2051. The extension of service life also impacted the assumptions for OPG's Nuclear Liabilities primarily due to cost increases related to additional used fuel bundles, partially offset by a decrease in the liability for decommissioning, resulting from the change in the service life assumptions. The net increase in the liabilities was $293 million, using a discount rate of 4.8 percent. The increase in liabilities was reflected with a corresponding increase in the fixed assets balance in the first quarter of 2010. As a result of these changes, OPG's depreciation expense decreased by $135 million in 2010.

The most recent update of the estimate for the Nuclear Liabilities was performed as at December 31, 2011 and resulted in a $934 million increase to OPG's liabilities, and a corresponding increase in the carrying value of the nuclear generating stations to which the liabilities relate. The change in the liabilities reflects the results of a comprehensive process undertaken to update the baseline cost estimates for each of OPG's nuclear waste management and decommissioning programs. OPG follows a standard process that requires such an update on a five-year cyclical basis unless business circumstances and assumptions require an earlier update process. This update to the Nuclear Liabilities results from the ONFA Reference Plan update process.

The baseline cost estimates included cash flows for decommissioning nuclear stations for approximately 40 years after station shut down and to 2071 for placement of used fuel into the long-term disposal repository followed by extended monitoring. The increase in the Nuclear Liabilities was primarily due to higher fixed costs associated with the Used Fuel Storage, Low and Intermediate Level Waste ("L&ILW") Disposal and L&ILW Storage programs, discounted using the current credit-adjusted risk-free rate. The change in estimate is expected to increase depreciation and accretion expenses in 2012 by $148 million and $32 million, respectively.

The net incremental undiscounted estimated cash flows for the Nuclear Liabilities resulting from the update process were discounted using the current credit-adjusted risk-free rate of 3.4 percent. A ten basis points (0.1 percent) increase or decrease in this discount rate will increase or decrease the carrying value of the liability by approximately $8 million or $9 million, respectively.

Restructuring

As a result of the decision to close two coal-fired units at each of the Lambton and Nanticoke generating stations in 2010 and two additional units at the Nanticoke generating station on December 31, 2011, OPG recorded restructuring charges of $21 million in 2011 (2010 – $27 million) related to severance costs. The severance costs were incurred in accordance with collective bargaining agreements with the Society of Energy Professionals and the Power Workers' Union.

Liability for Non-Nuclear Fixed Asset Removal

As a result of the review completed in 2011, the liability estimate for non-nuclear fixed asset removal was reduced by $5 million. The reduction reflected an increase in the expected cost recovery for station equipment and materials, largely offset by an increase in the demolition estimate. As a result of the liability adjustment, OPG recorded a corresponding reduction to the fixed asset balance of $2 million and a net gain of $3 million as at December 31, 2011. The gain has been recorded as other (gains) losses in the Thermal segment and Other category consistent with the segment classification of the stations.

Future Changes in Accounting Policy

OPG previously intended to adopt International Financial Reporting Standards ("IFRS") as of January 1, 2012. In December 2011, OPG decided to report under the United States generally accepted accounting principles ("US GAAP") beginning January 1, 2012.

In January 2012, OPG filed with and received approval from the Ontario Securities Commission for exemptive relief from the requirements of Section 3.2 of National Instrument 52-107, *Acceptable Accounting Policies and Auditing Standards*, which would otherwise require OPG to file its consolidated financial statements based on IFRS. The exemption allows OPG to file consolidated financial statements based on US GAAP as of January 1, 2012 without becoming a Securities and Exchange Commission registrant, or issuing public debt. The exemption applies to the financial years that begin on or after January 1, 2012 but before January 1, 2015. OPG is required to obtain the OEB's approval to use US GAAP for regulatory purposes in its next application for new regulated prices, which OPG plans to file on the basis of US GAAP in the second quarter of 2012.

OPG is in the process of determining the quantitative impact of transitioning to US GAAP. OPG will publish its first consolidated financial statements prepared in accordance with US GAAP as at and for the three months ending March 31, 2012, and for the corresponding comparative period. The transitional balance sheet as at January 1, 2011 will be disclosed in the March 31, 2012 interim consolidated financial statements.

NOTE 4 INVESTMENTS IN ASSET-BACKED COMMERCIAL PAPER

OPG classified its Asset Backed Commercial Paper ("ABCP") for the purposes of measurement as held-for-trading. Fair value was determined based on a discounted cash flow model, and OPG classified its investment in ABCP as Level 3 in the fair value hierarchy disclosures (Note 13). In 2010, OPG sold its ABCP holdings for $33 million and recognized a loss of $3 million in 2010 in other (gains) losses.

NOTE 5 SALE OF ACCOUNTS RECEIVABLE

In October 2003, the Company signed an agreement to sell an undivided co-ownership interest in its current and future accounts receivable (the "receivables") to an independent trust. The Company also retains an undivided co-ownership interest in the receivables sold to the trust. Under the agreement, OPG continues to service the receivables. The transfer provides the trust with ownership of a share of the payments generated by the receivables, computed on a monthly basis. The trust's recourse to the Company is generally limited to its income earned on the receivables.

OPG reflected the initial transfer to the trust of the co-ownership interest, and subsequent transfers required by the revolving nature of the securitization, as sales in accordance with the CICA Handbook Accounting Guideline 12, *Transfer of Receivables*. In accordance with this Guideline, the proceeds of each sale to the trust were deemed to be the cash received from the trust, net of the undivided co-ownership interest retained by the Company. In December 2011, in accordance with the receivable purchase agreement, OPG reduced the securitized receivable balance from $250 million to $50 million. As at December 31, 2011, the securitized receivable balance was $50 million (2010 - $250 million). The current securitization agreement extends to August 31, 2013 with a commitment of $250 million.

For 2011, OPG has recognized interest expense of $4 million (2010 - $4 million) on such sales at an average cost of funds of 1.9 percent (2010 - 1.5 percent).

The accounts receivable reported and securitized by the Company are as follows:

	Principal Amount of Receivables as at December 31		Average Balance of Receivables for the year ended December 31	
(millions of dollars)	**2011**	2010	**2011**	2010
Total receivables portfolio[1]	**375**	377	**369**	379
Receivables sold	**50**	250	**233**	250
Receivables retained	**325**	127	**136**	129
Average cost of funds			**1.9%**	1.5%

1 Amount represents receivables outstanding, including receivables that have been securitized, which the Company continues to service.

An immediate 10 percent or 20 percent adverse change in the discount rate would not have a material effect on the current fair value of the retained interest. There were no credit losses for the years ended December 31, 2011 and 2010.

Details of cash flows from securitizations for the years ended December 31 are as follows:

(millions of dollars)	**2011**	2010
Collections reinvested in revolving sales[1]	**2,800**	2,995
Cash flows from retained interest	**1,627**	1,548

1 Given the revolving nature of the securitization, the cash collections received on the receivables securitized are immediately reinvested in additional receivables resulting in no further cash proceeds to the Company over and above the securitized amount. The amounts reflect the total of twelve monthly amounts.

NOTE 6 FIXED AND INTANGIBLE ASSETS AND DEPRECIATION AND AMORTIZATION

Depreciation and amortization expense for the years ended December 31 consists of the following:

(millions of dollars)	2011	2010
Depreciation	534	571
Amortization of intangible assets	15	16
Amortization of regulatory assets and liabilities (NOTE 7)	174	101
	723	688

Fixed assets as at December 31 consist of the following:

(millions of dollars)	2011	2010
Property, plant and equipment		
Nuclear generating stations	8,254	7,220
Regulated hydroelectric generating stations	4,538	4,474
Unregulated hydroelectric generating stations	4,096	4,020
Thermal generating stations	1,433	1,424
Other fixed assets	1,048	1,039
Construction in progress	2,317	1,477
	21,686	19,654
Less: accumulated depreciation		
Generating stations	6,290	5,819
Other fixed assets	321	280
	6,611	6,099
	15,075	13,555

Intangible assets as at December 31 consist of the following:

(millions of dollars)	2011	2010
Intangible assets		
Nuclear generating stations	101	93
Unregulated hydroelectric generating stations	6	6
Thermal generating stations	2	2
Other intangible assets	244	236
Development in progress	10	8
	363	345
Less: accumulated amortization		
Generating stations	87	77
Other intangible assets	226	220
	313	297
	50	48

Interest capitalized to construction and development in progress at an average rate of five percent during 2011 (2010 – six percent) was $86 million (2010 – $76 million).

NOTE 7 REGULATORY ASSETS AND LIABILITIES

The OEB's decision on OPG's regulated prices issued in 2008 authorized certain variance and deferral accounts effective April 1, 2008, including those authorized pursuant to *Ontario Regulation 53/05*, a regulation under the *Ontario Energy Board Act, 1998*. In that decision the OEB also ruled on the disposition of the balances previously recorded by OPG in variance and deferral accounts as at December 31, 2007 pursuant to *Ontario Regulation 53/05*. The OEB's decisions issued in 2009 addressed the treatment of variance and deferral accounts for the period after December 31, 2009, established the Hydroelectric Deferral and Variance Over/Under Recovery Variance Account effective January 1, 2010, and, in response to OPG's motion to review and vary the part of the OEB's 2008 decision pertaining to the treatment of tax losses and their use for mitigation, authorized the Tax Loss Variance Account, effective April 1, 2008. Pursuant to the above decisions, during the period from January 1, 2010 to February 28, 2011, the Company recorded additions to and amortized the approved balances in the variance and deferral accounts as authorized by the OEB.

In its March 2011 decision and April 2011 order, the OEB approved OPG's request for the disposition of variance and deferral account balances as at December 31, 2010 without adjustments. During the period from March 1 to December 31, 2011, the Company amortized these approved balances based on recovery periods authorized by the OEB. Any shortfall or over-recovery of the approved variance and deferral account balances due to differences between actual and forecast production is recorded in the Nuclear and Hydroelectric Deferral and Variance Over/Under Recovery Variance Accounts and will be collected from, or refunded to, ratepayers following OPG's next application to the OEB. In its next application to the OEB, OPG plans to seek recovery of regulatory balances recorded subsequent to December 31, 2010.

In its March 2011 decision the OEB also authorized the continuation of previously existing variance and deferral accounts as proposed by OPG, with the exception of the Nuclear Fuel Cost Variance Account, which has been discontinued effective March 1, 2011. The OEB also established the Hydroelectric Surplus Baseload Generation ("SBG") Variance Account and the HIM Variance Account effective March 1, 2011. The Hydroelectric SBG Variance Account captures the financial impact of foregone production at OPG's regulated hydroelectric facilities due to SBG conditions. The HIM Variance Account captures the net revenues from the HIM that are required to be returned to ratepayers. During the period from March 1 to December 31, 2011, the Company recorded additions to the variance and deferral accounts as authorized by the OEB's March 2011 decision.

During the period from March 1 to December 31, 2011, the Company also recorded additions to the Pension and OPEB Cost Variance Account, which was established for the period from March 1, 2011 to December 31, 2012 by the decision and order issued by the OEB in June 2011 in granting OPG's motion to review and vary the OEB's March 2011 decision, as it relates to pension and OPEB costs.

During the year ended December 31, 2011, OPG recorded interest on outstanding regulatory balances at the interest rate of 1.47 percent per annum prescribed by the OEB. The interest rate fluctuated in the range of 0.55 percent to 1.20 percent per annum during the year ended December 31, 2010.

The regulatory assets and liabilities recorded as at December 31 were as follows:

(millions of dollars)	2011	2010
Regulatory assets		
Future Income Taxes (NOTE 11)	**692**	711
Bruce Lease Net Revenues Variance Account	**196**	250
Tax Loss Variance Account	**425**	492
Pension and OPEB Cost Variance Account	**96**	–
Nuclear Liabilities Deferral Account	**22**	39
Other	**26**	67
Total regulatory assets	**1,457**	1,559
Regulatory liabilities		
Nuclear Development Variance Account	**55**	111
Hydroelectric Water Conditions Variance Account	**41**	70
Income and Other Taxes Variance Account	**49**	40
Other	**9**	27
Total regulatory liabilities	**154**	248

The changes in the regulatory assets and liabilities during 2011 and 2010 were as follows:

(millions of dollars)	Future Income Taxes	Bruce Lease Net Revenues Variance	Tax Loss Variance	Pension and OPEB Cost Variance	Nuclear Liabilities Deferral	Nuclear Develop-ment Variance	Hydro-electric Water Conditions Variance	Income and Other Taxes Variance	Other (net)
Regulatory assets (liabilities), January 1, 2010	592	328	295	–	86	(55)	(55)	(21)	54
Change during the year	119	(81)	194	–	–	(50)	(14)	(19)	34
Interest	–	3	3		1	(1)	(1)	–	–
Amortization during the year	–	–	–	–	(48)	(5)	–	–	(48)
Regulatory assets (liabilities), December 31, 2010	711	250	492	–	39	(111)	(70)	(40)	40
Change during the year	(19)	56	33	95	–	7	(2)	(26)	13
Interest	–	3	7	1	1	(1)	(1)	(1)	–
Amortization during the year	–	(113)	(107)	–	(18)	50	32	18	(36)
Regulatory assets (liabilities), December 31, 2011	**692**	**196**	**425**	**96**	**22**	**(55)**	**(41)**	**(49)**	**17**

Future Income Taxes

In accordance with the CICA Handbook, OPG is required to recognize future income taxes associated with its rate regulated operations, including future income taxes on temporary differences related to the regulatory assets and liabilities recognized for accounting purposes. In addition, OPG is required to recognize a separate regulatory asset or liability for the amount of future income taxes expected to be included in future rates and recovered from or paid to customers. OPG recorded a reduction of $19 million to the regulatory asset for future income taxes during the year ended December 31, 2011 (2010 – an increase of $119 million).

Bruce Lease Net Revenues Variance Account

As per *Ontario Regulation 53/05*, OPG is required to include the difference between OPG's revenues and costs associated with its ownership of the two nuclear stations on lease to Bruce Power L.P. in the determination of the regulated prices for production from OPG's regulated nuclear facilities. The OEB established a variance account that captures differences between the forecast of OPG's revenues and costs associated with the Bruce generating stations that are included in the approved regulated nuclear prices, and the actual amounts.

During 2011, OPG recorded a net increase of $59 million, including $3 million of interest (2010 – a decrease of $78 million, net of $3 million of interest) to the regulatory asset for the variance account. The net increase during 2011 included $48 million related to lower than forecast earnings from the Nuclear Funds related to the Bruce generation stations, which was recognized as an increase to the earnings from the Nuclear Funds, and $30 million for lower than forecast revenues related to the Bruce lease agreement ("Bruce Lease") and related agreements including the impact of the derivative embedded in the Bruce Lease (refer to Note 13), which was recognized as an increase to revenue. These variances were partially offset by a decrease of $21 million recorded to the regulatory asset during 2011 related to a lower than forecast income tax expense, which was recognized as an increase to income tax expense.

The net decrease of $78 million in the regulatory asset during 2010 included a decrease of $168 million for the variance in earnings from the Nuclear Funds and increases of $81 million and $21 million related to variances in revenues and income tax expense, respectively.

In its March 2011 decision, the OEB approved the recovery of the balance in the Bruce Lease Net Revenues Variance Account as at December 31, 2010 over a 22-month period ending December 31, 2012. Accordingly, effective March 1, 2011, OPG records amortization of the regulatory asset for this account on a straight-line basis over this period.

Tax Loss Variance Account

The Tax Loss Variance Account authorized by the OEB in May 2009 and effective April 1, 2008 pertains to the treatment of tax losses and their use for mitigation. In accordance with the OEB's May 2009 decision on OPG's motion to review and vary the OEB's 2008 decision on regulated prices, this account recorded the difference between the amount of mitigation included in the approved regulated prices in effect prior to March 1, 2011 and the revenue requirement reduction available from tax losses carried forward from the period April 1, 2005 to March 31, 2008 recalculated as per the OEB's 2008 decision. During 2011, OPG recorded an increase of $40 million, including $7 million of interest, to the regulatory asset related to the Tax Loss Variance Account and a corresponding $33 million increase to revenue. During the year ended December 31, 2010, OPG recorded an increase of $197 million to the regulatory asset, including $3 million of interest, and a corresponding $194 million increase to revenue.

In its March 2011 decision, the OEB approved the recovery of the balance in the account as at December 31, 2010 over a 46-month period ending December 31, 2014. Accordingly, effective March 1, 2011, OPG records amortization for this account on a straight-line basis over this period.

Pension and OPEB Cost Variance Account

In March 2011, OPG filed with the OEB a motion to review and vary the OEB's March 2011 decision, as it related to updated pension and OPEB costs. In June 2011, the OEB established the Pension and OPEB Cost Variance Account in its decision and order granting OPG's motion. The variance account records the difference between OPG's actual pension and OPEB costs for the regulated business and related tax impacts, and those reflected in the current regulated prices. The account is in effect for the period from March 1, 2011 to December 31, 2012. During 2011, OPG recorded a regulatory asset of $96 million, including $1 million of interest, related to this variance account and corresponding reductions to OM&A expenses and income tax expense of $74 million and $21 million, respectively.

Nuclear Liabilities Deferral Account

Effective April 1, 2005, *Ontario Regulation 53/05* required OPG to establish a deferral account in connection with changes to its Nuclear Liabilities. The deferral account records the revenue requirement impact associated with the changes in the Nuclear Liabilities arising from an approved reference plan, in accordance with the terms of the ONFA.

Prior to April 1, 2008, OPG recorded a regulatory asset for this deferral account associated with the increase in the Nuclear Liabilities on December 31, 2006 arising from an updated approved reference plan in accordance with the terms of the ONFA (the "2006 Approved Reference Plan"). The OEB's March 2011 decision authorized a 22-month recovery period

ending December 31, 2012 for the remaining balance in the deferral account as at December 31, 2010 related to this increase in the Nuclear Liabilities. Accordingly, effective March 1, 2011, OPG records amortization of the regulatory asset for this deferral account on a straight-line basis over this period.

Nuclear Development Variance Account

In accordance with *Ontario Regulation 53/05,* the OEB established a variance account for differences between actual non-capital costs incurred by OPG in the course of planning and preparing for the development of proposed new nuclear facilities and the forecast amount of these costs included in the current nuclear regulated prices. OPG recorded a reduction in OM&A expenses of $7 million related to this variance account during 2011 (2010 – an increase of $50 million) reflecting such differences.

The OEB's March 2011 decision authorized the repayment of the balance in this variance account as at December 31, 2010 over a 22-month period ending December 31, 2012. Accordingly, effective March 1, 2011, OPG records amortization of the approved balance in the account on a straight-line basis over this period.

Hydroelectric Water Conditions Variance Account

The OEB authorized a variance account for the impact of the difference in regulated hydroelectric electricity production due to differences between forecast and actual water conditions. Forecast water conditions refer to those underlying the hydroelectric production forecast approved by the OEB in setting hydroelectric regulated prices.

For 2011 and 2010, OPG recorded decreases in revenue of $4 million and $22 million, respectively, and decreases in fuel expense related to GRC costs of $2 million and $8 million, respectively, reflecting actual water conditions that were favourable compared to those underlying the hydroelectric production forecasts approved by the OEB.

The OEB's March 2011 decision authorized the repayment of the balance in this variance account as at December 31, 2010 over a 22-month period ending December 31, 2012. Accordingly, effective March 1, 2011, the amortization of this balance is being recorded by OPG on a straight-line basis over this period.

Income and Other Taxes Variance Account

The OEB authorized a variance account to record deviations in income, capital and certain other tax-related expenses for the regulated business from those approved by the OEB in setting regulated prices caused by changes in tax rates or rules under the *Income Tax Act* (Canada) and the *Taxation Act, 2007* (Ontario), as modified by regulations made under the *Electricity Act, 1998,* as well as variances caused by reassessments. Variances resulting from reassessments of prior taxation years that have an impact on taxes payable related to the regulated business for the periods after March 31, 2008 are included in the account. In addition, the variance account captures certain changes to the property tax expense.

During 2011, OPG recorded an increase of $27 million (2010 – $19 million), including $1 million (2010 – nil) of interest, to the regulatory liability for this variance account primarily related to the impact of investment tax credits for eligible scientific research and experimental development expenditures, reassessments of certain prior taxation years, and lower than forecast statutory corporate income and capital tax rates. As a result, during 2011, OPG recorded additional OM&A expenses of $22 million and $2 million in each of additional capital and income tax expenses. During 2010, OPG recorded additional OM&A expenses of $14 million, an additional capital tax expense of $11 million, and a reduction in income tax expense of $6 million.

The OEB's March 2011 decision authorized the repayment of the balance in this variance account as at December 31, 2010 over a 22-month period ending December 31, 2012. Accordingly, effective March 1, 2011, the amortization of this balance is being recorded by OPG on a straight-line basis over this period.

Other Regulatory Assets and Liabilities

As at December 31, 2011, other regulatory assets included $11 million related to the Ancillary Services Net Revenue Variance Account (2010 – nil) and $9 million related to the Nuclear Fuel Cost Variance Account (2010 – $6 million). The Ancillary Services Net Revenue Variance Account was authorized by the OEB to capture differences between actual nuclear and regulated hydroelectric ancillary services net revenue and the forecast amounts of such revenue approved by the OEB in setting regulated prices. The Nuclear Fuel Cost Variance Account established by the OEB was effective up to March 1, 2011 and captured differences between actual nuclear fuel costs per unit of production and the forecast of these costs approved by the OEB. Only interest and amortization are recorded in this account effective March 1, 2011.

Other regulatory assets as at December 31, 2011 also included $4 million and $1 million in the Nuclear Interim Period Shortfall Variance Account and the Nuclear Deferral and Variance Over/Under Recovery Variance Account, respectively (2010 – $7 million and $21 million, respectively). The Nuclear Interim Period Shortfall Variance Account recorded, up to December 31, 2009, the under-collection of retroactive nuclear revenue for the period April 1, 2008 to November 30, 2008 resulting from differences between actual production and the forecast production approved in the OEB's 2008 decision. The balance of $1 million in the Hydroelectric SBG Variance Account and the unamortized balance of the variance account related to transmission outages and transmission restrictions were also included in other regulatory assets.

The Pickering A Return to Service ("PARTS") Deferral Account balance of $33 million was included in other regulatory assets as at December 31, 2010. The regulatory asset for this balance was fully amortized during the year ended December 31, 2011 based on the recovery periods authorized by the OEB's 2008 and March 2011 decisions.

As at December 31, 2011, other regulatory liabilities included $6 million in the Hydroelectric Deferral and Variance Over/Under Recovery Variance Account, and $1 million in each of the Hydroelectric Interim Period Shortfall Variance Account, the Capacity Refurbishment Variance Account and the HIM Variance Account. The Capacity Refurbishment Variance Account established by the OEB includes differences from forecast costs related to the refurbishment of the Darlington nuclear generating station as well as life extension initiatives at the Pickering B nuclear generation station. Forecast capacity refurbishment costs relate to those approved by the OEB in setting regulated prices.

Other regulatory liabilities as at December 31, 2010 included $9 million in the Ancillary Services Net Revenue Variance Account, $8 million in the Capacity Refurbishment Variance Account, $8 million in the Hydroelectric Deferral and Variance Over/Under Recovery Variance Account, and $2 million in the Hydroelectric Interim Period Shortfall Variance Account.

In its March 2011 decision, the OEB authorized the recovery or repayment of the balances as at December 31, 2010 of all variance and deferral accounts included in other regulatory assets and liabilities, with the exception of the PARTS Deferral Account, over a period of 22 months ending December 31, 2012. Accordingly, effective March 1, 2011, the amortization of these balances is being recorded by OPG on a straight-line basis over this period. The PARTS Deferral Account was authorized to be amortized over a period of ten months ending December 31, 2011.

Summary of the Impact of Regulatory Assets and Liabilities

The following table summarizes the income statement and other comprehensive income statement impacts of recognizing regulatory assets and liabilities:

	2011			2010		
(millions of dollars)	As Stated	Impact of Regulatory Assets and Liabilities	Financial Statements without the Impact of Regulatory Assets and Liabilities	As Stated	Impact of Regulatory Assets and Liabilities	Financial Statements without the Impact of Regulatory Assets and Liabilities
Revenue	**5,061**	**(61)**	**5,000**	5,367	(265)	5,102
Fuel expense	**754**	**15**	**769**	900	38	938
Operations, maintenance and administration	**2,756**	**64**	**2,820**	2,913	(58)	2,855
Depreciation and amortization	**723**	**(180)**	**543**	688	(131)	557
Accretion on fixed asset removal and nuclear waste management liabilities	**702**	**1**	**703**	660	13	673
Earnings on nuclear fixed asset removal and nuclear waste management funds	**(509)**	**48**	**(461)**	(668)	(168)	(836)
Property and capital taxes	**51**	**(5)**	**46**	77	(17)	60
Net interest expense	**165**	**9**	**174**	176	(1)	175
Income tax expense (recovery)	**11**	**(10)**	**1**	(60)	158	98
Other comprehensive loss	**(94)**	**11**	**(83)**	(45)	12	(33)

NOTE 8 LONG-TERM DEBT

Long-term debt consists of the following as at December 31:

(millions of dollars)	2011	2010
Long-term debt[1]		
Notes payable to the Ontario Electricity Financial Corporation		
Senior Notes[2]		
5.72% due 2012	**400**	400
3.43% due 2015	**500**	500
4.91% due 2016	**270**	270
5.35% due 2017	**900**	900
5.27% due 2018	**395**	395
5.44% due 2019	**365**	365
4.56% due 2020	**660**	660
4.28% due 2021	**185**	–
5.07% due 2041	**300**	–
Subordinated Notes[2]		
6.65% due 2011	**–**	375
UMH Energy Partnership debt[3]		
Senior Notes		
7.86% due to 2041	**196**	198
Lower Mattagami Energy Limited Partnership[4]		
Senior Notes		
2.59% due 2015	**96**	–
4.46% due 2021	**223**	–
5.26% due 2041	**248**	–
Non-recourse long-term debt[1]		
Brighton Beach Power L.P.		
Notes		
7.03% due to 2024[5]	**115**	119
Other long-term obligations at various floating rates[6]	**44**	46
	4,897	4,228
Less: due within one year	**413**	385
Long-term debt	**4,484**	3,843

1 The interest rates disclosed reflect the effective interest rate of the debt.

2 OEFC senior debt is entitled to receive, in full, amounts owing in respect of the senior debt before subordinated debt is entitled to receive any payments, and is pari passu to the UMH Energy Partnership and the Lower Mattagami Energy Limited Partnership ("LME") senior notes.

3 These notes are secured by the assets of the Upper Mattagami and Hound Chute project and are recourse to OPG until specified conditions have been satisfied following construction. These notes rank pari passu to the OEFC senior notes.

4 These notes are secured by the assets of the Lower Mattagami project including existing operating facilities and facilities being constructed and are recourse to OPG until the recourse release date. These notes rank pari passu to the OEFC senior notes.

5 The Brighton Beach Power L.P. debt is secured by a first charge on the assets of the partnership, an assignment of the bank accounts, and an assignment of the Brighton Beach project agreements. Brighton Beach Power L.P. has entered into floating-to-fixed interest rate hedges to manage the risks arising from fluctuation in interest rates.

6 The interest rates of the floating rate debt are referenced to various interest rate indices, such as the bankers' acceptance rate and the London Interbank Offered Rate, plus a margin.

During 2010, OPG executed an amended Niagara Tunnel project credit facility for an amount up to $1.6 billion. Interest will be fixed for each note issued at the time of advance at a rate equal to the prevailing Benchmark Government of Canada 10-Year Bond, plus a credit spread determined by the OEFC based on a survey of market rates. As at December 31, 2011, OPG issued $875 million (2010 – $690 million) against this facility.

OPG reached an agreement with the OEFC in the first quarter of 2011 for a $375 million credit facility to refinance notes as they mature over the period from January 2011 to December 2011. Refinancing under this agreement totalled $300 million as at December 31, 2011.

Interest paid in 2011 was $259 million (2010 – $258 million), of which $244 million (2010 – $242 million) relates to interest paid on long-term corporate debt.

The book value of the pledged assets as at December 31, 2011 was $2,305 million (2010 – $968 million).

A summary of the contractual maturities by year is as follows:

(millions of dollars)	
2012	413
2013	13
2014	13
2015	611
2016	287
Thereafter	3,560
	4,897

NOTE 9 SHORT-TERM CREDIT FACILITIES AND NET INTEREST EXPENSE

As at December 31, 2011, OPG maintains a $1 billion revolving committed bank credit facility, which is divided into two $500 million multi-year tranches. In May 2011, OPG renewed and extended one $500 million tranche to May 18, 2015. The other $500 million tranche has a maturity date of May 20, 2013. The total credit facility will continue to be used primarily as credit support for notes issued under OPG's commercial paper program. As at December 31, 2011, no commercial paper was outstanding under this facility. OPG had no other outstanding borrowings under the bank credit facility as at December 31, 2011.

During 2010, the LME established a $700 million bank credit facility to support the initial construction phase for the Lower Mattagami project and the commercial paper program. As at December 31, 2011, $10 million of commercial paper was outstanding under this program (2010 – $155 million). In March 2011, OPG executed a $700 million credit facility with the OEFC in support of the Lower Mattagami project. As at December 31, 2011, there was no outstanding borrowing under this credit facility.

As at December 31, 2011, OPG also maintains $25 million of short-term uncommitted overdraft facilities and $353 million of short-term uncommitted credit facilities, which support the issuance of Letters of Credit. OPG uses Letters of Credit to support its supplementary pension plans and for other purposes. As at December 31, 2011, there was a total of $305 million of Letters of Credit issued, which included $287 million for the supplementary pension plans, $17 million for general corporate purposes and $1 million related to the operation of the PEC.

In addition, as at December 31, 2011, the NWMO has issued a $3 million Letter of Credit for its supplementary pension plan.

The following table summarizes the net interest expense for the years ended December 31:

(millions of dollars)	2011	2010
Interest on long-term debt	254	244
Interest on short-term debt	15	16
Interest income	(9)	(3)
Capitalized interest	(86)	(76)
Interest applied to regulatory assets and liabilities	(9)	(5)
Net interest expense	165	176

NOTE 10 FIXED ASSET REMOVAL AND NUCLEAR WASTE MANAGEMENT

The liabilities for fixed asset removal and nuclear waste management on a present value basis consist of the following as at December 31:

(millions of dollars)	2011	2010
Liability for nuclear used fuel management	**8,523**	7,534
Liability for nuclear decommissioning and low and intermediate level waste management	**5,537**	5,013
Liability for non-nuclear fixed asset removal	**159**	157
Fixed asset removal and nuclear waste management liabilities	**14,219**	12,704

The changes in the fixed asset removal and nuclear waste management liabilities for the years ended December 31, are as follows:

(millions of dollars)	2011	2010
Liabilities, beginning of year	**12,704**	11,859
Increase in liabilities due to accretion	**703**	673
Increase in liabilities due to changes in assumptions related to the decision to commence the definition phase of the refurbishment of the Darlington nuclear generating station	**–**	293
Increase in liabilities resulting from the ONFA Reference Plan update process (NOTE 3)	**934**	–
Increase in liabilities due to nuclear used fuel and waste management variable expenses and other expenses	**55**	56
Liabilities settled by expenditures on fixed asset removal and nuclear waste management	**(172)**	(181)
Change in the liabilities for non-nuclear fixed asset removal	**(5)**	4
Liabilities, end of year	**14,219**	12,704

The cash and cash equivalents balance as at December 31, 2011 includes $10 million of cash and cash equivalents that are for the use of nuclear waste management activities (2010 – $3 million).

OPG's fixed asset removal and nuclear waste management liabilities are comprised of expected costs to be incurred up to and beyond termination of operations and the closure of nuclear, thermal generating plant facilities and other facilities. Costs will be incurred for activities such as dismantling, demolition and disposal of facilities and equipment, remediation and restoration of sites and the ongoing and long-term management of nuclear used fuel and low and intermediate level waste material.

Nuclear station decommissioning consists of original placement of stations into a safe store condition followed by a nominal 30-year safe store period prior to station dismantling. Under the terms of the Bruce Lease, OPG continues to be primarily responsible for the nuclear fixed asset removal and nuclear waste management liabilities associated with the Bruce nuclear generating stations.

The following costs are recognized as a liability:

- The present value of the costs of dismantling the nuclear and thermal production facilities and other facilities after the end of their useful lives;
- The present value of the fixed cost portion of nuclear waste management programs that are required, based on the total volume of waste expected to be generated over the assumed life of the stations; and
- The present value of the variable cost portion of nuclear waste management programs taking into account actual waste volumes generated to date.

The determination of the accrual for fixed asset removal and nuclear waste management costs requires significant assumptions, since these programs run for many years. The most recent update of the estimates for the nuclear waste management and decommissioning liabilities was performed as at December 31, 2011 as part of the ONFA Reference Plan update process. The update resulted in an increased estimate of costs mainly due to higher costs for the construction of the

low and intermediate level waste underground repository, higher costs for handling and storing of used fuel and low and intermediate level waste during station operations, and changes in economic indices. The increase was partially offset by lower expected costs to decommission reactors. The change in the cost estimate results from the ONFA Reference Plan update process.

For the purposes of calculating OPG's fixed asset removal and nuclear waste management liabilities, as at December 31, 2011, consistent with the current accounting end of life assumptions, nuclear and thermal plant closures are projected to occur over the next three to 42 years.

The updated estimates for the Nuclear Liabilities included cash flow estimates for decommissioning nuclear stations for approximately 40 years after station shut down and to 2071 for placement of used fuel into the long-term disposal repository followed by extended monitoring. The undiscounted amount of estimated future cash flows associated with the liabilities is approximately $31 billion in 2011 dollars. The weighted average discount rate used to calculate the present value of the liabilities at December 31, 2011 was 5.4 percent. The increase in the liabilities recorded as at December 31, 2011, which results from the ONFA Reference Plan update process, was determined by discounting the net incremental future cash flows at 3.4 percent. The cost escalation rates used to determine the increase in the cost estimates ranged from 1.9 percent to 3.7 percent.

In February 2010, OPG announced its decision to commence the definition phase of the refurbishment of the Darlington nuclear generating station. Accordingly, the service life of the Darlington nuclear generating station, for the purposes of calculating depreciation, was extended from 2019 to 2051. The extension of the service life also impacted the assumptions for OPG's Nuclear Liabilities primarily due to cost increases related to additional used fuel bundles, partially offset by a decrease in the liability for decommissioning, resulting from the change in the service life assumptions. The net increase in the liabilities recorded in 2010 was $293 million, using a discount rate of 4.8 percent.

The significant assumptions underlying operational and technical factors used in the calculation of the accrued Nuclear Liabilities are subject to periodic review. Changes to these assumptions, including changes to assumptions on the timing of the programs, end of life dates, financial indicators or the technology employed may result in significant changes to the value of the accrued liabilities. With programs of this duration and the evolving technology to handle the nuclear waste, there is a significant degree of uncertainty surrounding the measurement of the costs for these programs, which may increase or decrease over time.

Liability for Nuclear Used Fuel Management Costs

The liability for nuclear used fuel management represents the cost of managing the highly radioactive used nuclear fuel bundles. The federal Nuclear Fuel Waste Act ("NFWA") proclaimed into force in 2002 requires that Canada's nuclear fuel waste owners form a nuclear waste management organization and that each waste owner establish a trust fund for used fuel management costs. To estimate its liability for nuclear used fuel management costs, OPG has adopted a conservative approach consistent with the Adaptive Phased Management concept approved by the Government of Canada, which assumes a deep geologic repository in-service date of 2035.

Liability for Nuclear Decommissioning and Low and Intermediate Level Waste Management Costs

The liability for nuclear decommissioning and low and intermediate level waste management represents the estimated costs of decommissioning nuclear generating stations after the end of their service lives, as well as the cost of managing low and intermediate level radioactive wastes generated by the nuclear stations. The significant assumptions used in estimating future nuclear fixed asset removal costs include decommissioning of nuclear generating stations on a deferred dismantlement basis where the reactors will remain in a safe storage state for a 30-year period prior to a 10-year dismantlement period.

The life cycle costs of low and intermediate level waste management include the costs of processing and storage of such radioactive wastes during and following the operation of the nuclear stations, as well as the costs of ultimate long-term management of these wastes. The current assumptions used to establish the accrued low and intermediate level waste management costs include a disposal facility for low and intermediate level waste with a targeted in-service date of 2019. Agreement has been reached with local municipalities for OPG to develop a deep geologic repository for the long-term management of low and intermediate level waste adjacent to the Western Waste Management Facility. A federal environmental assessment in respect of this proposed facility is in progress.

Liability for Non-Nuclear Fixed Asset Removal Costs

The liability for non-nuclear fixed asset removal is based on third party cost estimates after an in-depth review of active plant sites and an assessment of required clean-up and restoration activities. This liability primarily represents the estimated costs of decommissioning thermal generating stations at the end of their service lives. The December 31, 2011 liability for the decommissioning of the thermal generating stations is based on retirement dates for these stations of between 2014 and 2030. The discount rates range from 1.5 percent to 5.8 percent. The total undiscounted amount of the estimated cash flows required to settle the non-nuclear obligation is $215 million.

In addition to the $121 million liability for active sites, OPG also has an asset retirement obligation of $38 million for decommissioning and restoration costs associated with plant sites that have been divested or are no longer in use.

OPG has no legal obligation associated with the decommissioning of its hydroelectric generating facilities and the costs cannot be reasonably estimated because of the long service life of these assets. With either maintenance efforts or rebuilding, the water control structures are assumed to be used for the foreseeable future. Accordingly, OPG has not recognized a liability for the decommissioning of its hydroelectric generating facilities.

Ontario Nuclear Funds Agreement

OPG sets aside and invests funds held in segregated custodian and trustee accounts specifically for discharging its nuclear fixed asset removal and nuclear waste management liabilities in accordance with the ONFA and the NFWA. OPG jointly oversees the investment management of the Nuclear Funds with the Province. The assets of the Nuclear Funds are maintained in third party custodian accounts that are segregated from the rest of OPG's assets.

The Decommissioning Fund was established to fund the future costs of nuclear fixed asset removal and long-term low and intermediate level nuclear waste management and a portion of used fuel storage costs after station life. As at December 31, 2011 and 2010, the Decommissioning Fund was in an underfunded position. OPG bears the risk and liability for cost estimate increases and fund earnings in the Decommissioning Fund.

The Used Fuel Fund was established to fund future costs of long-term nuclear used fuel waste management. OPG is responsible for the risk and liability for cost increases for used fuel waste management, subject to graduated liability thresholds specified in the ONFA, which limit OPG's total financial exposure at approximately $11.9 billion in December 31, 2011 dollars based on used fuel bundle projections of 2.23 million bundles, consistent with the station life assumptions included within the initial financial reference plan. The graduated liability thresholds do not apply to additional used fuel bundles beyond 2.23 million.

OPG makes quarterly payments to the Used Fuel Fund over the life of its nuclear generating stations, as specified in the ONFA. Required funding for 2011 under the ONFA was $250 million (2010 – $264 million), including a contribution to the Ontario NFWA Trust (the "Trust") of $139 million (2010 – $136 million). Included in the 2011 funding was a $133 million contribution related to future bundles over the 2.23 million threshold (2010 – $147 million). Based on the 2006 Approved Reference Plan, OPG is required to contribute annual amounts to the Used Fuel Fund, ranging from $84 million to $240 million over the years 2012 to 2016 (Note 16).

The NFWA was proclaimed into force in November 2002. As required under the NFWA, OPG established the Trust in November 2002 and made an initial deposit of $500 million into the Trust. The NFWA required OPG to make annual contributions of $100 million to the Trust until such time that the NWMO proposed funding formula to address the future financial costs of implementing the Adapted Phase Management approach was approved by the Federal Minister of Natural Resources. In 2009, this funding formula was approved. The Trust forms part of the Used Fuel Fund, and contributions to the Trust, as required by the NFWA, are applied towards OPG's ONFA payment obligations.

As required by the terms of the ONFA, the Province has provided a Provincial Guarantee to the Canadian Nuclear Safety Commission ("CNSC") since 2003, on behalf of OPG. The *Nuclear Safety and Control Act* (Canada) requires OPG to have sufficient funds available to discharge the current nuclear decommissioning and waste management liabilities. The Provincial Guarantee provides for any shortfall between the long-term liabilities and the current market value of the Used Fuel Fund and the Decommissioning Fund. OPG pays the Province an annual guarantee fee of 0.5 percent of the amount of the Provincial Guarantee provided by the Province. In December 2009, the CNSC approved an increase in the amount

of the Provincial Guarantee to $1,545 million effective on March 1, 2010. The value of this Provincial Guarantee will be in effect through to the end of 2012, when the next reference plan for the CNSC is planned to be approved. In 2011, OPG paid a guarantee fee of $8 million based on a Provincial Guarantee amount of $1,545 million, for the period January 1, 2011 to December 31, 2011. OPG is having preliminary discussions with the CNSC on the process for submitting the required documentation for the 2013 – 2017 Reference Plan.

In accordance with CICA Handbook Section 3855, the investments in the Nuclear Funds and the corresponding payables/receivables to/from the Province are classified as held-for-trading and are measured at fair value with realized and unrealized gains and losses recognized in OPG's consolidated statements of income and consolidated balance sheets.

Decommissioning Fund

Upon termination of the ONFA, the Province has a right to any excess funding in the Decommissioning Fund, which is the excess of the fair market value of the Decommissioning Fund over the estimated completion costs as per the most recently approved ONFA Reference Plan. When the Decommissioning Fund is overfunded, OPG limits the earnings it recognizes in its consolidated financial statements, through a charge to the Decommissioning Fund with a corresponding payable to the Province, such that the balance of the Decommissioning Fund would equal the cost estimate of the liability based on the most recently approved ONFA Reference Plan. The payable to the Province could be reduced in subsequent periods in the event that the Decommissioning Fund earns less than its target rate of return or in the event that a new ONFA Reference Plan is approved with a higher estimated decommissioning liability. When the Decommissioning Fund is underfunded, the earnings on the Decommissioning Fund reflect actual fund returns based on the market value of the assets.

The Province's right to any excess funding in the Decommissioning Fund upon termination of the ONFA results in OPG capping its annual earnings at 3.25 percent plus long-term Ontario Consumer Price Index, which is the rate of growth in the liability for the estimated completion cost, as long as the Decommissioning Fund is in an overfunded status.

The Decommissioning Fund's asset value on a fair value basis was $5,342 million as at December 31, 2011, which was less than the liability per the 2006 Approved Reference Plan. At December 31, 2010, the Decommissioning Fund's asset value on a fair value basis was $5,267 million, which was less than the liability per the 2006 Approved Reference Plan. Under the ONFA, if there is a surplus in the Decommissioning Fund such that the liabilities, as defined by the most recently approved ONFA Reference Plan, are at least 120 percent funded, OPG may direct up to 50 percent of the surplus over 120 percent to be treated as a contribution to the Used Fuel Fund, and the OEFC would be entitled to a distribution of an equal amount. Since OPG is responsible for the risks associated with liability cost increases and investment returns in the Decommissioning Fund, future contributions to the Decommissioning Fund may be required should the fund be in an underfunded position at the time of the next liability reference plan review.

The investments in the Decommissioning Fund include a diversified portfolio of equities and fixed income securities that are invested across geographic markets. The Nuclear Funds are invested to fund long-term liability requirements, and as such, the portfolio asset mix is structured to achieve the required return over a long-term horizon. While short-term fluctuations in market value will occur, managing the long-term return of the Nuclear Funds remains the primary goal.

Used Fuel Fund

Under the ONFA, the Province guarantees OPG's annual return in the Used Fuel Fund at 3.25 percent plus the change in the Ontario Consumer Price Index for funding related to the first 2.23 million of used fuel bundles ("committed return"). OPG recognizes the committed return on the Used Fuel Fund and includes it in the earnings on the nuclear fixed asset removal and nuclear waste management funds. The difference between the committed return on the Used Fuel Fund and the actual market return, based on the fair value of the Used Fuel Fund's assets, which includes realized and unrealized returns, is recorded as due to or due from the Province. The due to or due from the Province represents the amount the fund would pay to or receive from the Province if the committed return were to be settled as of the consolidated balance sheet date. As part of its regular contributions to the Used Fuel Fund, OPG was required to allocate $133 million of its 2011 contribution towards its liability associated with future fuel bundles that exceed the 2.23 million threshold (2010 – $147 million). As prescribed under the ONFA, OPG's contributions for incremental fuel bundles are not subject to the Province's guaranteed rate of return, but rather earn a return based on changes in the market value of the assets of the Used Fuel Fund.

As at December 31, 2011, the Used Fuel Fund asset value on a fair value basis was $6,556 million. The Used Fuel Fund value included a receivable from the Province of $47 million related to the committed return adjustment. As at December 31, 2010, the Used Fuel Fund asset value on a fair value basis was $5,979 million, including a payable to the Province of $219 million related to the committed return adjustment.

Under the ONFA, the Province is entitled to any surplus in the Used Fuel Fund, subject to a threshold funded ratio of 110 percent compared to the value of the associated liabilities.

The nuclear fixed asset removal and nuclear waste management funds as at December 31 consist of the following:

	Fair Value	
(millions of dollars)	**2011**	2010
Decommissioning Fund	**5,342**	5,267
Used Fuel Fund[1]	**6,509**	6,198
Due from (to) Province - Used Fuel Fund	**47**	(219)
	6,556	5,979
	11,898	11,246

1 The Ontario NFWA Trust represented $2,296 million as at December 31, 2011 (2010 - $1,949 million) of the Used Fuel Fund on a fair value basis.

The fair value of the securities invested in the Nuclear Funds as at December 31 is as follows:

	Fair Value	
(millions of dollars)	**2011**	2010
Cash and cash equivalents and short-term investments	**555**	581
Alternative investments	**212**	61
Pooled funds	**1,842**	1,835
Marketable equity securities	**4,863**	5,226
Fixed income securities	**4,345**	3,735
Derivatives	**2**	3
Net receivables/payables	**38**	29
Administrative expense payable	**(6)**	(5)
	11,851	11,465
Due from (to) Province - Used Fuel Fund	**47**	(219)
	11,898	11,246

The bonds and debentures held in the Used Fuel Fund and the Decommissioning Fund as at December 31 mature according to the following schedule:

	Fair Value	
(millions of dollars)	**2011**	2010
1 - 5 years	**1,153**	1,135
5 - 10 years	**594**	1,092
More than 10 years	**2,598**	1,508
Total maturities of debt securities	**4,345**	3,735
Average yield	**2.8%**	3.4%

The change in the Nuclear Funds for the years ended December 31 is as follows:

	Fair Value	
(millions of dollars)	2011	2010
Decommissioning Fund, beginning of year	5,267	4,876
Increase in fund due to return on investments	108	465
Decrease in fund due to reimbursement of expenditures	(33)	(74)
Decommissioning Fund, end of year	5,342	5,267
Used Fuel Fund, beginning of year	5,979	5,370
Increase in fund due to contributions made	250	264
Increase in fund due to return on investments	87	557
Decrease in fund due to reimbursement of expenditures	(26)	(26)
Increase in due from (to) Province	266	(186)
Used Fuel Fund, end of year	6,556	5,979

The earnings from the Nuclear Funds during 2011 and 2010 were impacted by the Bruce Lease Net Revenues Variance Account authorized by the OEB. The earnings on the Nuclear Funds for the years ended December 31 are as follows:

(millions of dollars)	2011	2010
Decommissioning Fund	108	465
Used Fuel Fund	353	371
Bruce Lease Net Revenues Variance Account (NOTE 7)	48	(168)
Total earnings	509	668

NOTE 11 INCOME TAXES

OPG follows the liability method of tax accounting for all its business segments and records an offsetting regulatory asset or liability for the future income taxes that are expected to be recovered or refunded through future regulated prices charged to customers.

During 2011, OPG recorded a decrease to the future income tax liability for the future income taxes that are expected to be recovered or refunded through regulated prices charged to customers of $19 million. Since these future income taxes are expected to be recovered through future regulated prices, OPG has recorded a corresponding decrease to the regulatory asset for future income taxes. As a result, the future income taxes for 2011 were not impacted. The decrease in the future income tax liability of $19 million for the rate regulated operations for the year ended December 31, 2011 included $5 million related to the decrease to the regulatory asset for future income taxes.

The following table summarizes the future income tax liabilities recorded for the rate regulated operations:

(millions of dollars)	2011	2010
January 1:		
Future income tax liabilities on temporary differences related to regulated operations	547	452
Future income tax liabilities resulting from the regulatory asset for future income taxes	164	140
	711	592
Changes during the year:		
(Decrease) increase in future income tax liabilities on temporary differences related to regulated operations	(14)	95
(Decrease) increase in future income tax liabilities resulting from the regulatory asset for future income taxes	(5)	24
Balance at December 31	692	711

A reconciliation between the statutory and the effective rate of income taxes is as follows:

(millions of dollars)	2011	2010
Income before income taxes	427	589
Combined Canadian federal and provincial statutory income tax rates, including surtax	28.0%	31.0%
Statutory income tax rates applied to accounting income	120	183
Increase (decrease) in income taxes resulting from:		
Income tax components of the regulatory variance accounts	2	(27)
Non-taxable income items	(23)	(6)
Change in income tax positions	(79)	(96)
Regulatory asset for future income taxes	8	(131)
Other	(17)	17
	(109)	(243)
Income tax expense (recovery)	11	(60)
Effective rate of income taxes	2.6%	(10.2%)

In 2011, a number of prior years' audits were completed and certain outstanding tax matters were resolved. As a result, OPG reduced its income tax liability by $79 million.

Significant components of the income tax expense (recovery) are presented in the table below:

(millions of dollars)	2011	2010
Current income tax expense (recovery):		
Current payable	68	35
Change to income tax position	(79)	(96)
Income tax components of the regulatory variance accounts (NOTE 7)	12	(6)
Other	(23)	–
	(22)	(67)
Future income tax expense (recovery):		
Change in temporary differences	35	159
Income tax components of the regulatory variance accounts (NOTE 7)	(10)	(21)
Regulatory asset for future income taxes	8	(131)
	33	7
Income tax expense (recovery)	11	(60)

The income tax effects of temporary differences that give rise to future income tax assets and liabilities as at December 31 are presented in the table below:

(millions of dollars)	2011	2010
Future income tax assets:		
Fixed asset removal and nuclear waste management liabilities	3,544	3,169
Other liabilities and assets	793	777
Future recoverable Ontario minimum tax	16	30
	4,353	3,976
Future income tax liabilities:		
Fixed assets	(1,383)	(1,160)
Nuclear fixed asset removal and nuclear waste management funds	(2,974)	(2,813)
Other liabilities and assets	(726)	(728)
	(5,083)	(4,701)
Net future income tax liabilities	(730)	(725)
Represented by:		
Current portion - asset	89	73
Long-term portion - liability	(819)	(798)
	(730)	(725)

The amount of cash income taxes paid for 2011 was $4 million (2010 - $44 million).

NOTE 12 PENSION AND OTHER POST EMPLOYMENT BENEFIT COSTS

The pension and OPEB obligations and the pension fund assets are measured as at December 31, 2011. Details of OPG's pension and OPEB obligations, pension fund assets and costs are presented in the following tables.

	Registered and Supplementary Pension Plans		Other Post Employment Benefits	
	2011	2010	2011	2010
Weighted Average Assumptions – Benefit Obligation at Year End				
Rate used to discount future benefits	5.10%	5.80%	5.07%	5.67%
Salary schedule escalation rate	3.00%	3.00%	–	–
Rate of cost of living increase to pensions	2.00%	2.00%	–	–
Initial health care trend rate	–	–	6.48%	6.53%
Ultimate health care trend rate	–	–	4.38%	4.69%
Year ultimate rate reached	–	–	2030	2030
Rate of increase in disability benefits	–	–	2.00%	2.00%

	Registered and Supplementary Pension Plans		Other Post Employment Benefits	
	2011	2010	**2011**	2010
Weighted Average Assumptions – Cost for the Year				
Expected return on plan assets net of expenses	**6.50%**	7.00%	**–**	–
Rate used to discount future benefits	**5.80%**	6.80%	**5.67%**	6.69%
Salary schedule escalation rate	**3.00%**	3.00%	**–**	–
Rate of cost of living increase to pensions	**2.00%**	2.00%	**–**	–
Initial health care trend rate	**–**	–	**6.53%**	6.62%
Ultimate health care trend rate	**–**	–	**4.69%**	4.69%
Year ultimate rate reached	**–**	–	**2030**	2030
Rate of increase in disability benefits	**–**	–	**2.00%**	2.00%
Expected average remaining service life for employees (years)	**12**	12	**11**	11

(millions of dollars)	Registered Pension Plans		Supplementary Pension Plans		Other Post Employment Benefits	
	2011	2010	**2011**	2010	**2011**	2010
Changes in Plan Assets						
Fair value of plan assets at beginning of year	**9,118**	8,216	**–**	–	**–**	–
Contributions by employer	**302**	272	**8**	5	**80**	77
Contributions by employees	**80**	80	**–**	–	**–**	–
Actual return on plan assets net of expenses	**586**	973	**–**	–	**–**	–
Settlement	**–**	(10)	**–**	–	**–**	–
Benefit payments	**(482)**	(413)	**(8)**	(5)	**(80)**	(77)
Fair value of plan assets at end of year	**9,604**	9,118	**–**	–	**–**	–
Changes in Projected Benefit Obligation						
Projected benefit obligation at beginning of year	**10,375**	8,610	**219**	179	**2,341**	1,910
Employer current service costs	**210**	160	**9**	6	**76**	52
Contributions by employees	**80**	80	**–**	–	**–**	–
Interest on projected benefit obligation	**603**	583	**13**	12	**133**	128
Benefit payments	**(482)**	(413)	**(8)**	(5)	**(80)**	(77)
Settlement	**–**	(10)	**–**	–	**–**	(2)
Past service costs	**–**	–	**–**	–	**1**	–
Net actuarial loss	**1,411**	1,365	**28**	27	**237**	330
Projected benefit obligation at end of year	**12,197**	10,375	**261**	219	**2,708**	2,341
Funded status - deficit at end of year	**(2,593)**	(1,257)	**(261)**	(219)	**(2,708)**	(2,341)

Pension fund assets are allocated among three principal investment categories. Furthermore, equity investments are diversified across Canadian, U.S. and non-North American stocks. There are real estate and infrastructure portfolios that are less than two percent of the total pension fund assets.

	2011	2010
Registered pension plan fund asset investment categories		
Equities	53%	60%
Fixed income	42%	35%
Cash and short-term investments	3%	5%
Other	2%	–
Total	100%	100%

Based on the most recently filed actuarial valuation of the OPG registered pension plan, as at January 1, 2011, there was an unfunded liability on a going-concern basis of $555 million and a deficiency on a wind-up basis of $5,663 million. In the previously filed actuarial valuation, as at January 1, 2008, there was an unfunded liability on a going-concern basis of $239 million and a deficiency on a wind-up basis of $2,846 million. The funded status to be determined in the next filed funding valuation, which must have an effective date no later than January 1, 2014, could be significantly different.

Based on the most recently filed actuarial valuation of the NWMO registered pension plan, as at January 1, 2011, there was a surplus on a going-concern basis of $6 million and a deficiency on a wind-up basis of $5 million. In the previously filed actuarial valuation, as at January 1, 2010, there was a surplus on a going-concern basis of $4 million and a deficiency on a wind-up basis of $5 million. The next filed funding valuation must have an effective date no later than January 1, 2012.

The supplementary pension plans are not funded, but are secured by Letters of Credit totalling $290 million as at December 31, 2011 (2010 – $256 million).

	Registered Pension Plans		Supplementary Pension Plans		Other Post Employment Benefits	
(millions of dollars)	2011	2010	2011	2010	2011	2010
Reconciliation of Funded Status to Accrued Benefit Asset (Liability)						
Funded status – deficit at end of year	(2,593)	(1,257)	(261)	(219)	(2,708)	(2,341)
Unamortized net actuarial loss	3,781	2,393	77	51	701	487
Unamortized past service costs	–	10	–	–	15	17
Accrued benefit asset (liability) at end of year	1,188	1,146	(184)	(168)	(1,992)	(1,837)
Short-term portion	–	–	(7)	(8)	(92)	(89)
Long-term portion	1,188	1,146	(177)	(160)	(1,900)	(1,748)

(millions of dollars)	Registered Pension Plans 2011	Registered Pension Plans 2010	Supplementary Pension Plans 2011	Supplementary Pension Plans 2010	Other Post Employment Benefits 2011	Other Post Employment Benefits 2010
Components of Cost Recognized						
Current service costs	**210**	160	**9**	6	**76**	52
Interest on projected benefit obligation	**603**	583	**13**	12	**133**	128
Expected return on plan assets net of expenses	**(629)**	(636)	**–**	–	**–**	–
Settlement	**–**	–	**–**	–	**–**	(2)
Amortization of past service costs	**10**	18	**–**	1	**3**	2
Amortization of net actuarial loss	**66**	–	**2**	1	**23**	–
Cost recognized[1]	**260**	125	**24**	20	**235**	180

1 Excluding the impact of the Pension and OPEB Cost Variance Account (Note 7).

(millions of dollars)	Registered Pension Plans 2011	Registered Pension Plans 2010	Supplementary Pension Plans 2011	Supplementary Pension Plans 2010	Other Post Employment Benefits 2011	Other Post Employment Benefits 2010
Components of Cost Incurred and Recognized						
Current service costs	**210**	160	**9**	6	**76**	52
Interest on projected benefit obligation	**603**	583	**13**	12	**133**	128
Actual return on plan assets net of expenses	**(586)**	(973)	**–**	–	**–**	–
Settlement gain	**–**	–	**–**	–	**–**	(2)
Past service costs	**–**	–	**–**	–	**1**	–
Net actuarial loss	**1,411**	1,365	**28**	27	**237**	330
Cost incurred in year	**1,638**	1,135	**50**	45	**447**	508
Differences between costs incurred and recognized in respect of:						
Actual return on plan assets net of expenses	**(43)**	337	**–**	–	**–**	–
Past service costs	**10**	18	**–**	1	**2**	2
Net actuarial loss	**(1,345)**	(1,365)	**(26)**	(26)	**(214)**	(330)
Cost recognized[1]	**260**	125	**24**	20	**235**	180

1 Excluding the impact of the Pension and OPEB Cost Variance Account (Note 7).

Total benefit costs, including the impact of Pension and OPEB Cost Variance Account, for the years ended December 31 are as follows:

(millions of dollars)	2011	2010
Registered pension plans	**260**	125
Supplementary pension plans	**24**	20
Other post employment benefits	**235**	180
Pension and OPEB Cost Variance Account (NOTE 7)	**(74)**	–
Pension and other post employment benefit costs	**445**	325

A one percent increase or decrease in the health care trend rate would result in an increase in the service and interest components of the 2011 OPEB cost recognized of $41 million (2010 – $30 million) or a decrease in the service and interest components of the 2011 OPEB cost recognized of $31 million (2010 – $23 million), respectively. A one percent increase or decrease in the health care trend rate would result in an increase in the projected OPEB obligation at December 31, 2011 of $478 million (2010 – $394 million) or a decrease in the projected OPEB obligation at December 31, 2011 of $369 million (2010 – $307 million).

NOTE 13 FINANCIAL INSTRUMENTS

The Risk Oversight Committee ("ROC") assists the Board of Directors to fulfill its oversight responsibilities for matters relating to identification and management of the Company's key business risks. Risk management activities are coordinated by a centralized Corporate Risk Management group led by the Chief Risk Officer. Risks that would prevent business units from achieving business plan objectives are identified at the business unit level. Senior management sets risk limits for the financing, procurement, and trading activities of the Company and ensures that effective risk management policies and processes are in place to ensure compliance with such limits in order to maintain an appropriate balance between risk and return. OPG's risk management process aims to continually evaluate the effectiveness of risk mitigation activities for identified key risks. The findings from this evaluation process are reported quarterly to the ROC.

OPG is exposed to risks related to changes in electricity prices associated with a wholesale spot market for electricity in Ontario, changes in interest rates, and movements in foreign currency that affect its assets, liabilities, and forecast transactions. Select derivative instruments are used to limit such risks. Derivatives are used as hedging instruments, as well as for trading purposes.

The following is a summary of OPG's financial instruments as at December 31:

Financial Instruments[1] (millions of dollars)	Designated Category	Fair Value 2011	2010
Cash and cash equivalents	Held-to-maturity	**642**	280
Long-term investments[2]	Held-for-trading	**32**	30
Nuclear fixed asset removal and nuclear waste management funds	Held-for-trading	**11,898**	11,246
Long-term debt (including current portion)	Other than Held-for-trading	**(5,452)**	(4,256)
Derivative embedded in the Bruce Lease	Held-for-trading	**(186)**	(163)
Other commodity derivative instruments included in current and long-term accounts receivable[3]	Held-for-trading	**4**	3
Other commodity derivative instruments included in current and long-term accounts payable[3]	Held-for-trading	**1**	–

1 The carrying value of other financial instruments included in accounts receivable and accounts payable and accrued charges approximates their fair value due to the immediate or short-term maturity of these financial instruments.

2 Represents investments owned by the Company's wholly owned subsidiary, OPGV, that are recorded at fair value in accordance with CICA Handbook AcG-18.

3 Derivative instruments not qualifying for hedge accounting.

Risks Associated with Financial Instruments

Credit Risk

Credit risk is the risk that a counterparty to a financial instrument might fail to meet its obligation under the terms of a financial instrument. To manage credit risk, the Company enters into transactions with creditworthy counterparties, limits the amount of exposure to each counterparty where possible, and monitors the financial condition of counterparties.

The following table provides information on credit risk from electricity transactions and trading activities as at December 31, 2011:

Credit Rating[1]	Number of Counterparties[2]	Potential Exposure[3] (millions of dollars)	Potential Exposure for Largest Counterparties: Number of Counterparties	Potential Exposure for Largest Counterparties: Counterparty Exposure (millions of dollars)
Investment grade	30	11	3	6
Below investment grade	4	15	2	14

1 Credit ratings are based on OPG's own analysis, taking into consideration external rating agency analysis where available, as well as recognizing explicit credit support provided through guarantees and Letters of Credit or other security.

2 OPG's counterparties are defined by each master agreement.

3 Potential exposure is OPG's assessment of maximum exposure over the life of each transaction at a 95 percent confidence interval.

The majority of OPG's revenues are derived from sales through the IESO administered spot market. Net credit exposure to the IESO of the securitized receivables retained at December 31, 2011 was $325 million (Note 5). Although the credit exposure to the IESO represents a significant portion of OPG's accounts receivable, the Company's management accepts this risk due to the IESO's primary role in the Ontario electricity market. The remaining receivables exposure was to a diverse group of generally high quality counterparties. OPG's allowance for doubtful debts at December 31, 2011 was less than $1 million.

OPG also enters into financial transactions with highly rated financial institutions in order to hedge interest rate and currency exposures. The potential credit exposure with these counterparties was nil at December 31, 2011. Other credit exposures include the investing of excess cash.

Investments

The Company limits its exposure to credit risk by investing in reasonably liquid (i.e., in normal circumstances, capable of liquidation within one month) securities that are rated by a recognized credit rating agency in accordance with minimum investment quality standards. In regard to derivative contracts, the Company limits its exposure to credit risk by engaging with high credit-quality counterparties.

Guarantees

As part of normal business, OPG and certain of its subsidiaries and joint ventures enter into various agreements providing financial guarantees to third-parties on behalf of certain subsidiaries and joint ventures. Such agreements include guarantees, standby Letters of Credit and surety bonds.

Market Risk

Market risk is the risk that changes to market prices, such as foreign exchange rates, interest rates, electricity prices, and prices of commodities used as fuel, will affect OPG's income or the value of the Company's assets. The objective of market risk management is to monitor and manage market risk exposures within acceptable parameters, while optimizing the return on risk.

The Company manages its exposure to market risks using forwards, risk limits and hedging strategies in the ordinary course of business. All such transactions are carried out within the guidelines set by the Executive Risk Committee.

Foreign Exchange Risk

OPG's foreign exchange exposure is attributable to two primary factors: United States dollar ("U.S. dollar") denominated transactions such as the purchase of fuels; and the influence of U.S. dollar denominated commodity prices on Ontario electricity market prices. OPG enters into foreign exchange derivatives and agreements with major financial institutions, when necessary, in order to manage the Company's exposure to foreign currency movements.

Interest Rate Risk

Interest rate risk is the risk that the value of assets and liabilities can change due to movements in related interest rates. Interest rate risk at OPG arises with the need to undertake new financing and with the addition of variable rate debt. The management of these risks is undertaken by using derivatives to hedge the exposure in accordance with corporate risk management policies. OPG periodically uses interest rate swap agreements to mitigate elements of interest rate risk exposure associated with anticipated financing.

Electricity Price Risk

Electricity price risk for the Company is the potential for adverse movements in the market price of electricity. Exposure to electricity price risk is reduced as a result of regulated prices and other contractual arrangements for a significant portion of OPG's business. To manage this risk, the Company seeks to maintain a balance between the commodity price risk inherent in its electricity production and electricity forward sales contracts to the extent that trading liquidity in the electricity commodity market provides the economic opportunity to do so.

The table below summarizes a sensitivity analysis for significant unsettled market risk exposures with respect to the Company's financial instruments as at December 31, 2011, with all other variables held constant. It shows how net income and other comprehensive income before tax would have been affected by changes in the relevant risk variable that were reasonably possible, at that date, over the year.

(millions of dollars – except where noted)	A Change of:	Impact on Net Income Before Tax	Impact on Other Comprehensive Income Before Tax
Interest rate[1]	+/– 86 basis points	–	+18/–19
Electricity price – Trading[2]		+/– 1.82	n/a

1 The interest rate sensitivity analysis was determined based on the exposure to interest rates for derivative instruments designated as hedges at the date of the consolidated balance sheet.

2 The sensitivity analysis around electricity prices was constructed using forward price volatilities that were based on historical daily forward electricity contract prices. The analysis considered contracts of varying time frames, traded in Ontario and neighbouring electricity markets.

Nuclear Funds Equity Price Risk

Equity price risk is the risk of loss due to a decline in the values of public equity markets. The Company is exposed to equity price risk primarily related to equity investments held in the Nuclear Funds that are classified on the consolidated balance sheets as held-for-trading and measured at fair value. To manage the long-term risk associated with equity prices, OPG and the Province have established investment policies and procedures that specify permitted investments and investment constraints for the Nuclear Funds. Such policies and procedures are approved annually by OPG and the Province.

Under the ONFA, the annual return in the Used Fuel Fund is guaranteed by the Province for funding related to the first 2.23 million of used fuel bundles. As at December 31, 2011, OPG had made total contributions of approximately $311 million towards incremental fuel bundles in excess of the 2.23 million threshold prescribed in the ONFA. As prescribed under the ONFA, earnings related to OPG's contributions for incremental fuel bundles are exposed to equity price risk. OPG is exposed to equity price risk in the Decommissioning Fund. Due to the long-term nature of the Decommissioning Fund's liabilities, the target asset mix of the Fund was established with the objective of meeting the long-term liabilities. As such, the Company is prepared to accept short-term market fluctuations with the expectation that equity securities in the long run will generate the return required to satisfy the obligations.

The performance of the Nuclear Funds related to stations leased to Bruce Power L.P. is subject to the Bruce Lease Net Revenues Variance Account established by the OEB. The variance account partially mitigates risk related to the Nuclear Funds as it captures the differences between actual and forecast earnings from the Nuclear Funds as they relate to the nuclear generating stations leased to Bruce Power L.P. Forecast earnings refer to those approved by the OEB in setting regulated nuclear prices.

The table below approximates the potential dollar impact on OPG's pre-tax profit, associated with a one percent change in the specified equity indices. This analysis is based on the market values of the Decommissioning Fund's equity holdings at December 31, 2011, as well as on the assumption that when one equity index changes by one percent, all other equity indices are held constant.

(millions of dollars)	2011
S&P/TSX Capped Composite Index	11
S&P 500	5
MSCI EAFE Index	4
MSCI World Index	6

Risk Associated with Leases and Partnership Arrangements

OPG has leased its Bruce nuclear generating stations to Bruce Power L.P. and is also a party to a number of partnerships which operate generating stations such as Brighton Beach and the PEC. Each of these generating stations are subject to numerous operational, financial, regulatory, and environmental risk factors. Although OPG may not be involved in the day to day operations of these stations, counterparty claims, defaults, or other risk factors could materially and adversely affect the Company.

In addition, under the Bruce Lease, lease revenue is reduced in each calendar year where the annual arithmetic average of the Hourly Ontario Electricity Price ("Average HOEP") falls below $30/MWh and certain other conditions are met. The conditional reduction to revenue in the future, embedded in the terms of the Bruce Lease, is treated as a derivative according to Section 3855. Derivatives are measured at fair value and changes in fair value are recognized in the consolidated statements of income. The exposure will continue until the Bruce units that are subject to this mechanism are no longer in operation, specific units are refurbished, or when the lease agreement is terminated. This exposure is mitigated as part of the OEB regulatory process, since the revenue from the lease of the Bruce generating stations is included in the determination of regulated prices and is subject to the Bruce Lease Net Revenues Variance Account.

Derivatives and Hedging

At the inception of a hedging relationship, OPG documents the relationship between the hedging instrument and the hedged item, its risk management objective and its strategy for undertaking the hedge. OPG also requires a documented assessment, both at hedge inception and on an ongoing basis, of whether or not the derivatives that are used in hedging transactions are highly effective in offsetting the changes attributable to the hedged risks in the fair values or cash flows of the hedged items.

Hedge accounting is applied when the derivative instrument is designated as a hedge and is expected to be effective throughout the life of the hedged item. When such a derivative instrument hedge ceases to be effective as a hedge, or when designation of a hedging relationship is terminated, any associated deferred gains or losses are recognized in income in the current period. When a hedged item ceases to exist, any associated deferred gains or losses are recognized in the current period's consolidated statement of income.

Derivative Instruments Qualifying for Hedge Accounting

The following table provides the estimated fair value of derivative instruments designated as hedges.

(millions of dollars – except where noted)	Notional Quantity	Terms	Fair Value	Notional Quantity	Terms	Fair Value
		December 31, 2011			December 31, 2010	
Floating-to-fixed interest rate hedges	**32**	**1 – 8 years**	**(5)**	35	1 – 9 years	(4)
Forward start interest rate hedges	**760**	**1 – 13 years**	**(115)**	375	1 – 12 years	(21)

OPG has entered into a number of forward start interest rate swap agreements to hedge against the effect of changes in interest rates for long-term debt for the Niagara Tunnel. In 2011, the LME entered into forward start interest rate swaps to hedge against the effect of future changes in interest rates for long-term debt for the Lower Mattagami project.

One of the Company's joint ventures is exposed to changes in interest rates. The joint venture entered into an interest rate swap to manage the risk arising from fluctuations in interest rates by swapping the short-term floating interest rate with a fixed rate of 5.33 percent. OPG's proportionate interest in the swap is 50 percent and is accounted for as a hedge.

Net losses of $6 million, which include the impact of income taxes, related to derivative instruments qualifying for hedge accounting were recognized in net income during the year ended December 31, 2011 (2010 – net gains of $6 million). Existing net losses of $7 million deferred in accumulated other comprehensive loss at December 31, 2011 are expected to be reclassified to net income within the next 12 months.

Derivative Instruments Not Qualifying for Hedge Accounting

The carrying amount (fair value) of commodity derivative instruments not designated for hedging purposes is as follows:

(millions of dollars – except where noted)	Notional Quantity	Fair Value	Notional Quantity	Fair Value
	December 31, 2011		December 31, 2010	
Commodity derivative instruments				
Assets	**2.3 TWh**	**4**	1.7 TWh	3
Liabilities	**0.2 TWh**	**(1)**	0.07 TWh	–
Total		**3**		3

Forward pricing information is inherently uncertain and therefore the fair values of derivative instruments may not accurately represent the cost to enter into these positions. To address the impact of some of this uncertainty on trading positions, OPG established liquidity reserves against the mark-to-market gains or losses of these positions. These reserves did not impact trading revenue during the year ended December 31, 2011 (2010 – an increase of $1 million).

The fair value of the derivative liability embedded in the terms of the Bruce Lease was $186 million as at December 31, 2011 (2010 – $163 million). This increase in the fair value of the derivative liability was primarily due to a decrease in expected future annual Average HOEP. The pre-tax income statement impact as a result of changes in the liability is offset by the pre-tax income statement impact of the Bruce Lease Net Revenues Variance Account.

Fair Value Hierarchy

OPG is required to classify fair value measurements using a fair value hierarchy. This hierarchy groups financial assets and liabilities into three levels based on the significance of inputs used in measuring the fair value of the financial assets and liabilities. The level within which the financial asset or liability is classified is determined based on the attribute of significance to the inputs to the fair value measurement. The fair value hierarchy has the following levels:

Level 1: Valuation of inputs is based on unadjusted quoted market prices observed in active markets for identical assets or liabilities

Level 2: Valuation is based on inputs other than quoted prices under Level 1 that are observable for the asset or liability, either directly or indirectly

Level 3: Valuation is based on inputs for the asset or liability that are not based on observable market data

The following tables present financial assets and liabilities measured at fair value in accordance with the fair value hierarchy:

(millions of dollars)	December 31, 2011 Level 1	Level 2	Level 3	Total
Decommissioning Fund	**2,294**	**2,950**	**98**	**5,342**
Used Fuel Fund	**131**	**6,419**	**6**	**6,556**
Forward start interest rate hedges	**–**	**(115)**	**–**	**(115)**
Commodity derivative instruments	**–**	**1**	**–**	**1**
Investment in OPGV	**16**	**–**	**16**	**32**
Floating-to-fixed interest rate hedges	**–**	**(5)**	**–**	**(5)**
Derivative embedded in the Bruce Lease	**–**	**–**	**(186)**	**(186)**
Total assets and liabilities	**2,441**	**9,250**	**(66)**	**11,625**

(millions of dollars)	December 31, 2010 Level 1	Level 2	Level 3	Total
Decommissioning Fund	2,540	2,698	29	5,267
Used Fuel Fund	83	5,895	1	5,979
Forward start interest rate hedges	–	(21)	–	(21)
Commodity derivative instruments	–	–	–	–
Investment in OPGV	13	–	17	30
Floating-to-fixed interest rate hedges	–	(4)	–	(4)
Derivative embedded in the Bruce Lease	–	–	(163)	(163)
Total assets and liabilities	2,636	8,568	(116)	11,088

During the year ended December 31, 2011, there were no transfers between Level 1 and Level 2. A $1 million transfer occurred from Level 1 to Level 3 as a result of an investment no longer being actively traded.

Fair value is the value that a financial instrument can be closed out or sold in an arm's length transaction with a willing and knowledgeable counterparty. The fair value of financial instruments traded in active markets is based on quoted market prices at the consolidated balance sheet dates. A market is regarded as active if quoted prices are readily and regularly available from an exchange, dealer, broker, industry group, pricing service, or regulatory agency, and those prices represent actual and regularly occurring market transactions on an arm's length basis. The quoted market price used for financial assets held by OPG is the current bid price. These instruments are included in Level 1 and are comprised primarily of equity investments and fund investments.

For financial instruments which do not have quoted market prices directly available, fair values are estimated using forward price curves developed from observable market prices or rates which may include the use of valuation techniques or models based, wherever possible, on assumptions supported by observable market prices or rates prevailing at the dates of the consolidated balance sheets. This is the case for over-the-counter derivatives and securities, which include energy commodity derivatives, foreign exchange derivatives, interest rate swap derivatives, and fund investments. Valuation models use general assumptions and market data and therefore do not reflect the specific risks and other factors that would affect a particular instrument's fair value. The methodologies used for calculating the fair value adjustments are reviewed on an ongoing basis to ensure that they remain appropriate. If all significant inputs required to fair value an instrument are observable, the instrument is included in Level 2.

If one or more of the significant inputs is not based on observable market data, the instrument is included in Level 3. Specific valuation techniques were used to value these instruments. Significant Level 3 inputs include recent comparable transactions, comparable benchmark information, bid/ask spread of similar transactions, and other relevant factors.

The following table presents the changes in OPG's assets and liabilities measured at fair value based on Level 3 during 2011.

	December 31, 2011			
(millions of dollars)	Decommissioning Fund	Used Fuel Fund	Investments in OPGV	Derivative Embedded in the Bruce Lease
Opening balance	**29**	**1**	**17**	**(163)**
Total gains (losses) included in net income[1]	**3**	**–**	**3**	**(23)**
Purchases, sales, issues and settlements	**65**	**5**	**(4)**	**–**
Transfers into Level 3	**1**	**–**	**–**	**–**
Closing balance	**98**	**6**	**16**	**(186)**

1 Total gains (losses) exclude the impact of regulatory assets and liabilities.

	December 31, 2010			
(millions of dollars)	Decommissioning Fund	Used Fuel Fund	Investments in OPGV	Derivative Embedded in the Bruce Lease
Opening balance	–	–	17	(118)
Total losses included in net income[1]	(1)	–	–	(45)
Purchases, sales, issues and settlements	30	1	–	–
Closing balance	29	1	17	(163)

1 Total losses exclude the impact of regulatory assets and liabilities.

Sensitivity Analysis

Assumptions related to future electricity prices impacts the valuation of the derivative liability embedded in the Bruce Lease as at December 31, 2011. The effect of changing inputs to reasonably possible alternative assumptions is presented in the table below. This sensitivity analysis is determined based on the existing assessment of market conditions with consideration of historical changes in electricity prices.

(millions of dollars)	Long-term Accounts Payable	Net Income Before Tax[1]
Favourable change in assumptions related to electricity prices	(86)	86
Unfavourable change in assumptions related to electricity prices	39	(39)

1 Net Income Before Tax excludes the impact of regulatory assets and liabilities.

The volatilities of OPG's investments in the Decommissioning Fund, the Used Fuel Fund and OPGV that were classified as Level 3 were not considered significant. As such, a sensitivity analysis on these investments resulted in a negligible change in the fair value.

Liquidity Risk

OPG's derivative and non-derivative liabilities include current accounts payable, floating-to-fixed interest rate hedges, and long-term debt. The contractual maturity of long-term debt is disclosed in Notes 8 and 16.

Liquidity risk arises through excess financial obligations over available financial assets, due at any point in time. The Company's approach to managing liquidity is to continuously monitor its ability to maintain sufficient liquidity to meet its liabilities when due, under both normal and stressed conditions, without incurring unacceptable losses.

NOTE 14 CAPITAL MANAGEMENT

The Board of Directors' objectives when managing capital are to safeguard the Company's assets and its ability to operate on a commercial basis, while undertaking future development projects that provide an adequate return to the shareholder, and benefits to other stakeholders. The Company attempts to maintain an optimal capital structure and minimize the cost of capital.

The Company is owned 100 percent by the Province. To minimize its cost of capital, the Company targets financial metrics consistent with an investment grade credit rating. This provides the Company with access to capital markets in the future, while targeting a low cost of debt financing.

The Company monitors capital on the basis of the ratio of total debt to total capitalization. Debt is calculated as total borrowings, including long-term debt due within one year, long-term debt and the amount of the Letters of Credit. Total capitalization is calculated as total debt plus total shareholder's equity as shown in the consolidated balance sheets. A financial covenant in OPG's $1 billion revolving committed bank credit facility requires OPG to maintain, on a fully consolidated basis, a ratio of debt to total capitalization of not greater than 0.65:1.0 at any time.

As per the OEB's 2008 and March 2011 decisions on OPG's regulated prices, the deemed capital structure for the regulated business is 53 percent debt and 47 percent equity.

The table below summarizes OPG's debt to total capitalization position as at December 31:

(millions of dollars)	2011	2010
Long-term debt due within one year	**413**	385
Long-term debt	**4,484**	3,843
Letters of Credit[1]	**305**	281
Total debt	**5,202**	4,509
Total shareholder's equity	**8,393**	8,085
Total capitalization	**13,595**	12,594
Total debt to total capitalization	**38%**	36%

1 The NWMO Letter of Credit of $3 million (2010 – $2 million) was excluded.

There were no changes in the Company's approach to capital management during the year ended December 31, 2011.

NOTE 15 COMMON SHARES

As at December 31, 2011 and 2010, OPG had 256,300,010 common shares issued and outstanding at a stated value of $5,126 million. OPG is authorized to issue an unlimited number of common shares without nominal or par value. Any issue of new shares is subject to the consent of OPG's shareholder.

NOTE 16 COMMITMENTS AND CONTINGENCIES

Litigation

Various legal proceedings are pending against OPG or its subsidiaries covering a wide range of matters that arise in the ordinary course of its business activities.

On August 9, 2006, a Notice of Action and Statement of Claim filed with the Ontario Superior Court of Justice in the amount of $500 million was served on OPG and Bruce Power L.P. by British Energy Limited and British Energy International Holdings Limited (together "British Energy"). The British Energy claim against OPG pertains to corrosion in the Bruce Unit 8 Steam Generators, in particular, erosion of the support plates through which the boiler tubes pass. The claim amount includes $65 million due to an extended outage to repair some of the alleged damage. The balance of the amount claimed is based on an increased probability the steam generators will have to be replaced or the unit taken out of service prematurely. OPG leased the Bruce nuclear generating stations to Bruce Power L.P. in 2001.

British Energy is involved in arbitration with the current owners of Bruce Power L.P. regarding an alleged breach of British Energy's representations and warranties to the current owners when they purchased British Energy's interest in Bruce Power L.P. (the "Arbitration"). If British Energy is successful in defending against the Arbitration claim, they will not have suffered any damages to attempt to recoup from OPG. This Arbitration commenced on April 5, 2010. The Arbitration closing arguments were completed in the third quarter of 2011. It may take some time for the arbitrator to come to a decision after the completion of the closing arguments.

British Energy previously indicated that they did not require OPG or Bruce Power L.P. to actively defend the court action until the conclusion of the Arbitration. Although the Arbitration had not concluded, British Energy requested that OPG file a Statement of Defense. OPG and Bruce Power L.P. advised British Energy that if British Energy wishes the court action to proceed prior to the conclusion of the Arbitration, the defendants would bring a motion for a Stay of proceedings, a Dismissal of the current action or, in the alternative, a motion to extend the time for service of the Statement of Defense until the conclusion of the Arbitration. That motion was scheduled to be heard on March 5, 2010 but was adjourned at the request of British Energy. The return date of that motion is yet to be set.

During the third quarter of 2011, OPG settled a claim and arbitration with a certain First Nation in one settlement agreement. OPG was directed by its Shareholder to pay a part of the Shareholder's portion of the settlement liability on its behalf. As a result, OPG recorded a distribution of $14 million to the First Nation, which was recorded as a reduction to retained earnings in the third quarter of 2011. This settlement did not have a material impact on the Company's financial position.

Certain other First Nations have commenced actions against OPG for interference with their respective reserve and traditional land rights. As well, OPG has been brought into certain actions by the First Nations against other parties as a third party defendant. Each of these matters is subject to various uncertainties. Some of these matters may be resolved unfavourably. While it is not possible to determine the ultimate outcome of the various pending actions, it is the Company's belief that their resolution is not likely to have a material adverse impact on its financial position.

Environmental

Current operations are subject to regulation with respect to emissions to air, water, and land as well as other environmental matters by federal, provincial, and local authorities. The cost of obligations associated with current operations is provided for on an ongoing basis. Management believes it has made adequate provision in its consolidated financial statements to meet certain other environmental obligations. During 2011, a reduction of $19 million to the environmental liabilities was recognized related to the Regulated – Hydroelectric segment. As at December 31, 2011, OPG's environmental liabilities were $19 million (2010 – $39 million).

Guarantees

As part of normal business, OPG and certain of its subsidiaries and joint ventures enter into various agreements providing financial or performance assurance to third-parties on behalf of certain subsidiaries. Such agreements include guarantees, standby Letters of Credit and surety bonds.

Contractual and Commercial Commitments

The Company's contractual obligations and other significant commercial commitments as at December 31, 2011, are as follows:

(millions of dollars)	2012	2013	2014	2015	2016	Thereafter	Total
Contractual obligations:							
Fuel supply agreements	227	191	171	170	113	334	1,206
Contributions under the ONFA[1]	240	157	94	96	84	578	1,249
Long-term debt repayment	415	14	15	605	286	3,568	4,903
Interest on long-term debt	239	223	222	215	200	1,300	2,399
Unconditional purchase obligations	103	102	101	99	11	37	453
Operating lease obligations	27	30	30	32	31	–	150
Operating licence	36	36	36	1	1	–	110
Pension contributions[2]	370	315	–	–	–	–	685
Other[3]	98	41	92	37	17	117	402
Significant commercial commitments:	1,755	1,109	761	1,255	743	5,934	11,557
Niagara Tunnel	176	40	–	–	–	–	216
Lower Mattagami	546	490	181	38	–	–	1,255
Total	2,477	1,639	942	1,293	743	5,934	13,028

1 Contributions under the ONFA are based on the 2007 – 2011 reference plan approved in 2006.

2 The pension contributions include ongoing funding requirements, and additional funding requirements towards the deficit, in accordance with the actuarial valuations of the OPG and NWMO registered pension plans as at January 1, 2011. The next actuarial valuations of the OPG and NWMO plans must have effective dates no later than January 1, 2014 and 2012, respectively. The pension contributions are affected by various factors including market performance, changes in actuarial assumptions, plan experience, changes in the pension regulatory environment, and the timing of funding valuations. Funding requirements after 2013 are excluded due to significant variability in the assumptions required to project the timing of future cash flows. The amount of OPG's additional voluntary contribution, if any, is revisited on an annual basis.

3 Includes contractual obligations related to the Darlington Refurbishment project up to March 2, 2012.

Niagara Tunnel

As of December 31, 2011, tunnel boring machine ("TBM") mining activity was completed and the TBM disassembly is in progress. Some uncertainty with respect to the cost and schedule for the liner installation will continue. Notwithstanding the uncertainty, the Niagara Tunnel is expected to be completed within the approved budget of $1.6 billion and the approved project completion date of December 2013.

The capital project expenditures for the year ended December 31, 2011 were $264 million and the life-to-date capital expenditures were $1.1 billion. The project is debt financed through the OEFC. During 2010, OPG executed an amendment to the Niagara Tunnel project credit facility with the OEFC to finance the project for up to $1.6 billion.

Lower Mattagami

Construction activities on the Lower Mattagami River commenced in June 2010 to add one additional generating unit at each of the existing Little Long, Harmon and Kipling stations. In addition, OPG will replace the existing Smoky Falls generating station with a new three-unit station. Upon completion in June 2015, the project is expected to increase the capacity of the four stations on the Lower Mattagami River by 438 MW.

The capital project expenditures for the year ended December 31, 2011 were $474 million and the life-to-date expenditures were $766 million. The project budget of $2.6 billion includes the design-build contract as well as contingencies, interest and other OPG costs, including project management, contract management, impact agreements with First Nations, and transmission connection costs.

Darlington Refurbishment Project

On March 1, 2012, OPG awarded the retube and feeder replacement contract, which includes the planning, design, testing of tooling, design and construction of a full scale reactor mock-up facility for testing and training, and removal and replacement of major reactor components of the four reactors at the Darlington generating station. The contract will be completed in two phases – a definition phase and an execution phase. The contract value during the definition phase is estimated at over $600 million for a period of three to four years. The execution phase work, which is still to be estimated and valued, includes removal and replacement of the 480 pressure tubes and calandria tubes, and 960 feeder pipes for each of the station's four reactors.

Other Commitments

The Company maintains labour agreements with the Power Workers' Union and The Society of Energy Professionals; the agreements are effective until March 31, 2012 and December 31, 2012, respectively. As at December 31, 2011, OPG had approximately 11,400 regular employees and about 89 percent of its regular labour force is covered by the collective bargaining agreements.

Contractual and commercial commitments as noted exclude certain purchase orders as they represent purchase authorizations rather than legally binding contracts and are subject to change without significant penalties.

Proxy Property Taxes

In November 2005, OPG received a letter from the Ministry of Finance indicating its intent to recommend to the Minister of Finance that an Ontario regulation covering proxy property taxes be updated retroactive to April 1, 1999 to reflect reassessments and appeal settlements of certain OPG properties since that date. OPG continues to monitor the resolution to this issue with the Ministry of Finance as updates to the regulation may not occur for several years. OPG has not recorded any amounts relating to this anticipated regulation change.

NOTE 17 OTHER (GAINS) LOSSES

(millions of dollars)	2011	2010
Reduction to an environmental provision (NOTE 16)	(19)	–
Change in estimated cost required to decommission thermal generating stations	(3)	–
ABCP (NOTE 4)	–	3
Other	(7)	2
Other (gains) losses	(29)	5

NOTE 18 BUSINESS SEGMENTS

OPG has five reportable business segments. The business segments are Regulated – Nuclear Generation, Regulated – Nuclear Waste Management, Regulated – Hydroelectric, Unregulated – Hydroelectric, and Unregulated – Thermal.

Regulated – Nuclear Generation Segment

OPG's Regulated – Nuclear Generation business segment operates in Ontario, generating and selling electricity from the nuclear generating stations that it owns and operates. The business segment includes electricity generated by the Pickering A and B, and Darlington nuclear generating stations. This business segment also includes revenue under the terms of a lease arrangement and related agreements with Bruce Power L.P. related to the Bruce nuclear generating stations. This revenue includes lease revenue and revenue from services such as heavy water sales and detritiation. Revenue is also earned from isotope sales and ancillary services. Ancillary revenues are earned through voltage control and reactive support. Revenues from isotope sales and ancillary services are included in the computation of the regulated prices for OPG's nuclear facilities by the OEB.

Bruce Nuclear Generating Stations

In May 2001, the Company leased its Bruce A and Bruce B nuclear generating stations to Bruce Power L.P. until 2018, with options to renew for up to 25 years.

During 2011, OPG recorded lease revenue related to the Bruce generating stations of $237 million (2010 - $232 million). The net book value of fixed assets on lease to Bruce Power L.P. at December 31, 2011 was $1,317 million (2010 - $855 million).

Regulated – Nuclear Waste Management

OPG's Regulated – Nuclear Waste Management segment engages in the management of used nuclear fuel and low and intermediate level waste, the decommissioning of OPG's nuclear generating stations (including the stations on lease to Bruce Power L.P.), the management of the Nuclear Funds, and related activities including the inspection and maintenance of the waste storage facilities. Accordingly, accretion expense on the Nuclear Liabilities and earnings from the Nuclear Funds are reported under this segment.

As the nuclear generating stations operate over time, OPG incurs variable costs related to nuclear used fuel and low and intermediate level waste generated. These costs increase the Nuclear Liabilities through the generation of additional used nuclear fuel bundles and other waste. These variable costs are charged to current operations in the Regulated – Nuclear Generation segment in order to reflect the cost of producing energy and the earning of revenue under the Bruce Power lease arrangement and related agreements. Since variable costs increase the Nuclear Liabilities in the Regulated – Nuclear Waste Management segment, OPG records an inter-segment charge between the Regulated – Nuclear Generation and the Regulated – Nuclear Waste Management segments. The impact of the inter-segment charge between these segments is eliminated on OPG's consolidated statements of income and consolidated balance sheets.

The Regulated – Nuclear Waste Management segment is considered regulated because the costs associated with the Nuclear Liabilities are included in the determination of regulated prices for production from OPG's regulated nuclear facilities by the OEB.

Regulated – Hydroelectric Segment

OPG's Regulated – Hydroelectric business segment operates in Ontario, generating and selling electricity from most of the Company's baseload hydroelectric generating stations. The business segment is comprised of electricity generated by the Sir Adam Beck 1, 2 and Pump generating station, DeCew Falls 1 and 2, and the R.H. Saunders hydroelectric facilities. Ancillary revenues are earned through offering available generating capacity as operating reserve and through the supply of other ancillary services including voltage control and reactive support, certified black start facilities, automatic generation control, and other services. These ancillary revenues are included in the computation of the regulated prices for these facilities by the OEB.

Unregulated – Hydroelectric Segment

The Unregulated – Hydroelectric business segment operates in Ontario, generating and selling electricity from its hydroelectric generating stations, which are not subject to rate regulation. Ancillary revenues are earned through offering available generating capacity as operating reserve, and through the supply of other ancillary services including voltage control and reactive support, certified black start facilities, automatic generation control, and other services.

Unregulated – Thermal Segment

The Unregulated – Thermal business segment operates in Ontario, generating and selling electricity from its thermal generating stations, which are not subject to rate regulation. Ancillary revenues are earned through offering available generating capacity as operating reserve, and the supply of other ancillary services including voltage control and reactive support, automatic generation control, and other services.

Other

The Other category includes revenue that OPG earns from its 50 percent joint venture share of Brighton Beach related to an energy conversion agreement between Brighton Beach and Shell Energy North America (Canada) Inc. This category also includes OPG's share of joint venture revenues and expenses from the PEC gas-fired generating station, which is co-owned with TransCanada Energy Ltd. In addition, the Other category includes revenue from real estate rentals.

The revenue and expenses related to OPG's trading and other non-hedging activities are also included in the Other category. As part of these activities, OPG transacts with counterparties in Ontario and neighbouring energy markets in predominantly short-term trading activities of typically one year or less in duration. These activities relate primarily to physical energy that is purchased and sold at the Ontario border, sales of financial risk management products and sales of energy-related products. All contracts that are not designated as hedges are recorded as assets or liabilities at fair value, with changes in fair value recorded in Other category revenue.

OM&A expenses of the generation segments include an inter-segment service fee for the use of certain property, plant and equipment, and intangible assets held within the Other category. The total service fee is recorded as a reduction to the Other category's OM&A expenses. The service fee included in OM&A expenses by segment for the years ended December 31 is as follows:

(millions of dollars)	2011	2010
Regulated - Nuclear Generation	22	25
Regulated - Hydroelectric	2	2
Unregulated - Hydroelectric	4	3
Unregulated - Thermal	7	8
Other	(35)	(38)

Segment Income (Loss) for the Year Ended **December 31, 2011** (millions of dollars)	Nuclear Generation	Regulated Nuclear Waste Management	Hydroelectric	Unregulated Hydroelectric	Unregulated Thermal	Other	Elimination	Total
Revenue	3,064	57	729	492	608	166	(55)	5,061
Fuel expense	243	–	261	75	175	–	–	754
Gross margin	2,821	57	468	417	433	166	(55)	4,307
Operations, maintenance and administration	1,964	65	108	236	414	24	(55)	2,756
Depreciation and amortization	473	–	38	75	88	49	–	723
Accretion on fixed asset removal and nuclear waste management liabilities	–	695	–	–	7	–	–	702
Earnings on nuclear fixed asset removal and nuclear waste management funds	–	(509)	–	–	–	–	–	(509)
Property and capital taxes (recovery)	26	–	–	(2)	15	12	–	51
Restructuring	–	–	–	–	21	–	–	21
Other (gains) losses	(3)	–	(19)	(2)	20	(25)	–	(29)
Income (loss) before interest and income taxes	361	(194)	341	110	(132)	106	–	592

Segment Income (Loss) for the Year Ended December 31, 2010 (millions of dollars)	Nuclear Generation	Regulated Nuclear Waste Management	Unregulated Hydro-electric	Unregulated Hydro-electric	Unregulated Thermal	Unregulated Other	Elimination	Total
Revenue	3,030	45	734	497	936	168	(43)	5,367
Fuel expense	185	–	246	64	405	–	–	900
Gross margin	2,845	45	488	433	531	168	(43)	4,467
Operations, maintenance and administration	2,104	52	99	230	453	18	(43)	2,913
Depreciation and amortization	398	–	62	70	99	59	–	688
Accretion on fixed asset removal and nuclear waste management liabilities	–	653	–	–	7	–	–	660
Earnings on nuclear fixed asset removal and nuclear waste management funds	–	(668)	–	–	–	–	–	(668)
Property and capital taxes	39	–	11	4	13	10	–	77
Restructuring	–	–	–	–	27	–	–	27
Other losses	2	–	–	–	–	3	–	5
Income (loss) before interest and income taxes	302	8	316	129	(68)	78	–	765

Selected Consolidated Balance Sheet Information as at **December 31, 2011** (millions of dollars)	Nuclear Generation	Regulated Nuclear Waste Management	Unregulated Hydro-electric	Unregulated Hydro-electric	Unregulated Thermal	Unregulated Other	Total
Segment fixed assets in service, net	**4,745**	**–**	**3,749**	**3,333**	**204**	**727**	**12,758**
Segment construction in progress	**295**	**–**	**1,146**	**847**	**15**	**14**	**2,317**
Segment property, plant and equipment, net	**5,040**	**–**	**4,895**	**4,180**	**219**	**741**	**15,075**
Segment intangible assets in service, net	**17**	**–**	**–**	**5**	**1**	**17**	**40**
Segment development in progress	**6**	**–**	**–**	**–**	**–**	**4**	**10**
Segment intangible assets, net	**23**	**–**	**–**	**5**	**1**	**21**	**50**
Segment materials and supplies inventory, net:							
Short-term	**68**	**–**	**–**	**–**	**14**	**2**	**84**
Long-term	**348**	**–**	**–**	**1**	**31**	**–**	**380**
Segment fuel inventory	**354**	**–**	**–**	**–**	**301**	**–**	**655**
Nuclear fixed asset removal and nuclear waste management funds	**–**	**11,898**	**–**	**–**	**–**	**–**	**11,898**
Fixed asset removal and nuclear waste management liabilities	**–**	**(14,060)**	**–**	**–**	**(153)**	**(6)**	**(14,219)**

Selected Consolidated Balance Sheet Information as at December 31, 2010 (millions of dollars)	Nuclear Generation	Regulated Nuclear Waste Management	Unregulated Hydro-electric	Unregulated Hydro-electric	Unregulated Thermal	Unregulated Other	Total
Segment fixed assets in service, net	3,963	–	3,750	3,324	282	759	12,078
Segment construction in progress	174	–	913	367	20	3	1,477
Segment property, plant and equipment, net	4,137	–	4,663	3,691	302	762	13,555
Segment intangible assets in service, net	18	–	–	2	1	19	40
Segment development in progress	3	–	–	–	–	5	8
Segment intangible assets, net	21	–	–	2	1	24	48
Segment materials and supplies inventory, net:							
Short-term	65	–	–	–	19	1	85
Long-term	364	–	–	1	35	–	400
Segment fuel inventory	337	–	–	–	397	–	734
Nuclear fixed asset removal and nuclear waste management funds	–	11,246	–	–	–	–	11,246
Fixed asset removal and nuclear waste management liabilities	–	(12,547)	–	–	(151)	(6)	(12,704)

Selected Consolidated Cash Flow Information (millions of dollars)	Nuclear Generation	Regulated Nuclear Waste Management	Unregulated Hydro-electric	Unregulated Hydro-electric	Unregulated Thermal	Unregulated Other	Total
Year ended December 31, 2011							
Investment in fixed and intangible assets	**239**	**–**	**297**	**566**	**9**	**34**	**1,145**
Year ended December 31, 2010							
Investment in fixed and intangible assets	211	–	272	442	23	30	978

NOTE 19 RELATED PARTY TRANSACTIONS

Given that the Province owns all of the shares of OPG, related parties include the Province, Infrastructure Ontario, the OPA and the other successor entities of Ontario Hydro, including Hydro One Inc. ("Hydro One"), the IESO, and the OEFC. The transactions between OPG and related parties are measured at the exchange amount, which is the amount of consideration established and agreed to by the related parties.

These transactions for the years ended December 31 are summarized below:

(millions of dollars)	Revenue	Expenses	Revenue	Expenses
	2011		2010	
Hydro One				
Electricity sales	**16**	**–**	18	–
Services	**–**	**13**	–	16
Province of Ontario				
GRC, water rentals and land tax	**–**	**122**	–	116
Guarantee fee	**–**	**8**	–	7
Used Fuel Fund rate of return guarantee	**266**	**–**	–	186
OEFC				
GRC and proxy property tax	**–**	**217**	–	208
Interest expense on long-term notes	**–**	**196**	–	203
Capital tax	**–**	**(10)**	–	11
Income taxes, net of investment tax credits	**–**	**(54)**	–	77
Contingency support agreement	**367**	**–**	258	–
Infrastructure Ontario				
Reimbursement of expenses incurred during the procurement process for new nuclear units	**–**	**(2)**	–	3
IESO				
Electricity sales	**3,983**	**43**	4,215	27
Ancillary services	**55**	**–**	61	–
OPA	**155**	**–**	142	–
	4,842	**533**	4,694	854

As at December 31, 2011, accounts receivable included $3 million (2010 – $3 million) due from Hydro One, $327 million (2010 – $129 million) due from the IESO, and $57 million (2010 – $22 million) due from the OPA. Accounts payable and accrued charges at December 31, 2011 included $7 million (2010 – $2 million) due to Hydro One and $1 million (2010 – $3 million) due to Infrastructure Ontario.

NOTE 20 JOINT VENTURES

Significant joint ventures include Brighton Beach and the PEC, which are 50 percent owned by OPG.

The following condensed information from the consolidated statements of income, cash flows and balance sheets details the Company's share of its investments in joint ventures that have been proportionately consolidated:

(millions of dollars)	2011	2010
Proportionate joint venture operations		
Revenue	**94**	97
Expenses	**(47)**	(62)
Net income	**47**	35
Proportionate joint venture cash flows		
Operating activities	**67**	74
Investing activities	**–**	(3)
Financing activities	**(66)**	(76)
Share of changes in cash and cash equivalents	**1**	(5)
Proportionate joint venture balance sheets		
Current assets	**26**	25
Long-term assets	**526**	553
Current liabilities	**(20)**	(15)
Long-term liabilities	**(160)**	(167)
Share of net assets	**372**	396

NOTE 21 INVESTMENT COMPANY

The Company applied CICA Handbook AcG-18 for all investments owned by OPGV. OPGV is a wholly owned subsidiary of the Company and its results are included in the Company's consolidated financial statements. The carrying amount of OPGV's investments was $32 million (2010 – $30 million) and the amount was included as long-term investments on the consolidated balance sheets.

As a result of the application of AcG-18, the Company's net income and other assets for 2011 increased by $6 million (2010 – decreased by $1 million). The net realized gains on the investments held by OPGV were $1 million in 2011 (2010 – nil).

The gross unrealized gains and losses on the investments held by OPGV as at December 31, 2011 were $15 million and $23 million, respectively. The gross unrealized gains and losses on the investments held by OPGV as at December 31, 2010 were $11 million and $25 million, respectively.

NOTE 22 RESEARCH AND DEVELOPMENT

For the year ended December 31, 2011, research and development expenses of $125 million (2010 – $127 million) were charged to operations.

NOTE 23 NET CHANGES IN NON-CASH WORKING CAPITAL BALANCES

(millions of dollars)	2011	2010
Accounts receivable	**(190)**	101
Prepaid expenses	**15**	5
Fuel inventory	**79**	103
Materials and supplies	**1**	47
Accounts payable and accrued charges	**58**	(189)
Income and capital taxes recoverable/payable	**10**	(20)
	(27)	47

NOTE 24 NON-CONTROLLING INTEREST

OPG has entered into a partnership agreement with the Lac Seul First Nation ("LSFN") regarding the 12.5 MW Lac Seul generating station. In July 2009, OPG transferred ownership of the station to the Lac Seul LP partnership. OPG has a 75 percent ownership interest in the partnership, while the LSFN has a 25 percent interest.

OPG consolidates the results of the Lac Seul LP and the non-controlling interest represents the LSFN's 25 percent ownership interest in the partnership.

NOTE 25 RESTRUCTURING

Restructuring charges of $21 million were recorded in 2011 due to the recognition of severance costs related to the closure of two additional coal-fired units at the Nanticoke generating station in 2011, consistent with the Energy Plan and Supply Mix Directive. During 2010, restructuring charges of $27 million were recorded due to the recognition of severance costs related to the closure of two coal-fired units at each of the Lambton and Nanticoke coal-fired generating stations. OPG conducted discussions with key stakeholders, including the Society of Energy Professionals and the Power Workers' Union, in accordance with their respective collective bargaining agreements.

The change in the restructuring liability for severance costs during 2011 and 2010 is as follows:

(millions of dollars)	
Liability, January 1, 2010	–
Restructuring charges during the year	27
Payments during the year	(12)
Liability, December 31, 2010	15
Restructuring charges during the year	21
Payments during the year	(13)
Liability, December 31, 2011	**23**

OFFICERS*

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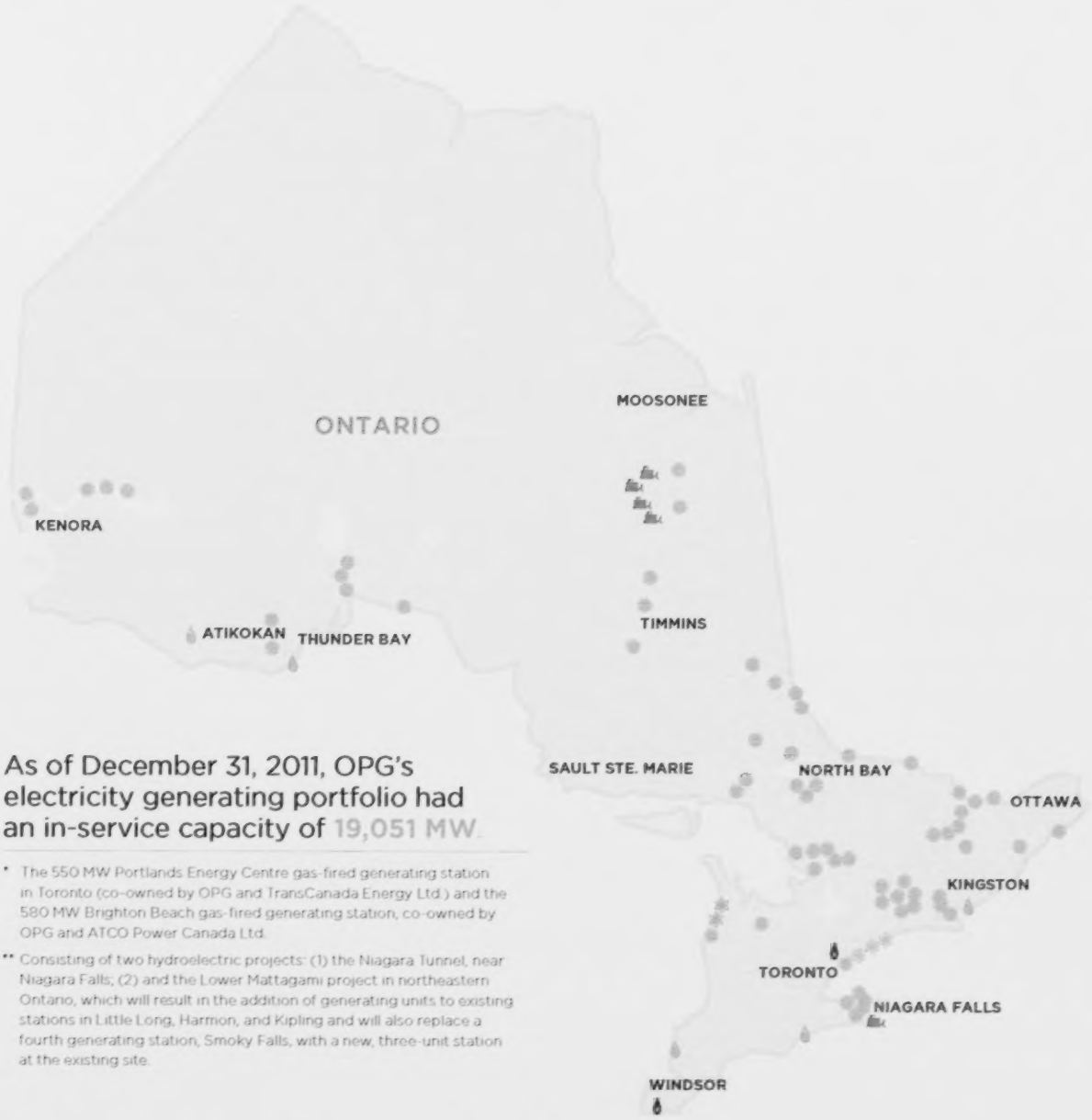
Acting Senior Vice President, Law and General Counsel

PIERRE TREMBLAY
Chief Nuclear Operating Officer

* As of March 2, 2012.

ONTARIO POWER GENERATION
FACILITIES

3	2	5	2	65	2	2
Nuclear Stations	Leased Nuclear Stations	Thermal Stations	Co-owned Gas-Fired Stations*	Hydroelectric Stations	Wind Power Turbines	Hydroelectric Projects Under Construction**



As of December 31, 2011, OPG's electricity generating portfolio had an in-service capacity of 19,051 MW.

* The 550 MW Portlands Energy Centre gas-fired generating station in Toronto (co-owned by OPG and TransCanada Energy Ltd.) and the 580 MW Brighton Beach gas-fired generating station, co-owned by OPG and ATCO Power Canada Ltd.

** Consisting of two hydroelectric projects: (1) the Niagara Tunnel, near Niagara Falls; (2) and the Lower Mattagami project in northeastern Ontario, which will result in the addition of generating units to existing stations in Little Long, Harmon, and Kipling and will also replace a fourth generating station, Smoky Falls, with a new, three-unit station at the existing site.

"I'm proud of the fact that every dollar of net income that we earn stays here in Ontario to be reinvested in energy infrastructure and contribute to the social and economic fabric of the province. This is what a public power company should do."

TOM MITCHELL
President and CEO

ONTARIO POWER GENERATION

This annual report is also available in French on our website –
Ce rapport est également publié en français sur notre site Web – at www.opg.com.

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